



COUNTY BOROUGH OF SUNDERLAND.

Annual Report

ON THE

Health and Sanitary Condition of Sunderland

FOR THE YEAR 1904.

HENRY RENNEY,

M.D., B.S., D.P.H.,

MEDICAL OFFICER OF HEALTH,
MEDICAL SUPERINTENDENT OF THE BOROUGH
SANATORIUM.

Sunderland:

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1905.

COUNTY BOROUGH OF SUNDERLAND.

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Meetings every alternate Thursday, at 7-30 p.m.

Accounts at 7-15 p.m.

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Medical Officer of Health and Medical Superintendent
of the Borough Sanatorium:

HENRY RENNEY, M.D., B.S., and D.P.H. (Durh.)

Deputy Medical Officer of Health:

D. DURWARD BROWN, M.R.C.S. (Eng.), L.R.C.P. (Lond.)

Inspector of Nuisances:

MR. JOHN PENNOCK (Cert. San. Inst.)

Deputy Inspector of Nuisances :

MR. JAMES S. WATSON (Cert. San. Inst.)

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MR. WILLIAM STOBART.

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MR. FRED. OATES (Cert. San. Inst.) MR. GEO. REED.

Matron to the Borough Sanatorium:

MISS C. BELL.

Engineer to the Borough Sanatorium:

MR. W. S. OATES.

Housing Superintendent, Harrison Buildings :

MR. JOSEPH D. WARD.

HEALTH DEPARTMENT,

TOWN HALL,

SUNDERLAND.

*To the Chairman and Members of the
Health Committee.*

GENTLEMEN,

I beg to submit for your consideration my
Report on the Health of the Borough and the
work of the Health Department for the year
1904.

I am, Gentlemen,

Your obedient Servant,

HENRY RENNEY,

Medical Officer of Health.

March 21st, 1905.

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COUNTY BOROUGH OF SUNDERLAND.

HEALTH DEPARTMENT.

ANNUAL REPORT REPORT,
1904.
FOR THE YEAR 1904.

The death-rate from all causes for 1904 was 19·4 per 1,000 of the population, being a decrease of 0·4 per 1,000 as compared with 1903. Comparison with the previous Year.

Sunderland stands 2·2 per 1,000 higher than the 76 great towns in point of mortality, and compared with the whole of England and Wales 1 per 1,000 higher. —With the great towns of England and Wales.

There was a decrease in the deaths from Measles, there being 62 less than in the previous year. The type of Scarlet Fever was particularly mild, there being only 3 deaths as compared with 36 in 1903. Whooping Cough was responsible for 64, an increase of 16 on the previous year. The mortality from Influenza and Diphtheria showed a slight decrease. There were only seven more cases of Typhoid Fever notified than in the previous year, but, unfortunately, an increase in the number of deaths to the extent of eleven. This is not to be attributed to a more insanitary state of the town, for I consider owing to the various sanitary reforms of the last few years the Borough was never in such a healthy state as it is at present. Typhoid Fever comes on so insidiously that those attacked often remain at work after contracting it, and these are the cases which too often help to swell the death-rate. Zymotic Diseases.

There was an increase of 70 deaths from Diarrhœa, the great majority of these being among infants under the age of one year. The increase was doubtless due to the hot summer. Yet the death-rate for this disease was less in Sunderland than in the 76 great towns by 0·1 per 1,000. The incidence of Diarrhœa coincides with the rise in temperature of the earth, and it is found that as soon as the temperature, taken at a depth of four feet, reaches Diarrhœa.

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1904.

56° F., then Diarrhœa begins. This is clearly shown by the Meteorological and Disease Chart at the end of the Report. Summer Diarrhœa is no doubt due to a definite Micro-organism, which requires a certain temperature for the maintenance of its activity. It grows well in milk, and if it should find an entrance into this article of diet, very speedily sets up the disease in those who consume it. As milk is the staple food of infants they are the greatest sufferers. The disease-germ is found in dust from various sources. Milk, therefore, cannot be too carefully protected from the entrance of dust, and it should also be kept as cool as possible. Boiling, or sterilizing, prevents the growth of the Micro-organism, and in hot weather this should always be done. Extreme heat of the weather, however, is not the sole cause of Diarrhœa in infants, for, unfortunately, the disease is found more or less during the whole year. Improper feeding, either from lack of knowledge or mistaken kindness, is too common, and is one of the most potent causes of our much too-high Infantile Mortality. Perhaps some time in the future we may hope to see established Classes in the Schools where the elder girls will be taught a few of the simple laws which govern the functions of the more important organs of the human body, a knowledge of which will fit them to perform the duties of motherhood, and enable them to feed their offspring in a way that shall help to reduce the Infantile death-rate. Of course, there are other factors to be considered in connection with Infantile Mortality, and the Health Committee is fully alive to them, and will be, I have no doubt, as progressive in the future in endeavouring to combat those agencies which militate against the Public Health, as they have been in the past.

Demolition of
Ash-pits, &c.

The demolition of insanitary ashpits, privies, ash-closets, and pan-closets is still proceeding, with the substitution of water-closets. This is a most important work, and one which has rendered the districts where the change has been made, considerably more healthy than previously. The former improvement, together with the laying down of impervious pavement, especially in narrow streets and lanes, in certain districts, should do much to reduce the incidence of Diarrhœa and Enteric Fever in the future.

Other causes
of Death.

Brain Diseases, General Paralysis of the Insane, and other forms of Insanity show an increase of 26, whilst Meningitis shows a decrease of 33.

The mortality from Heart Diseases, Bronchitis, and Pneumonia is almost the same as for the previous year.

There were twelve more accidents than in 1903. The number of suicides was reduced by seven.

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1904.

While there was a slight reduction in the number of deaths due to all Tubercular Diseases, it is pleasing to note that there were 46 fewer deaths from Consumption.

Cancer, unfortunately, showed an increase of 17.

There were almost exactly the same number of Premature Births as in 1903. These, together with Debility at Birth, Atrophy, Debility and Marasmus, were responsible for 299 deaths, being only 11 less than in the previous year. Our Infantile Mortality rate is, on the whole, diminishing; yet, taking an average of ten years, it is still much too high. In 1904, out of every thousand children born, 165 died before reaching the age of one year, i.e., nearly 10 per cent. of the total deaths at all ages.

On January 3rd, a case of Smallpox was reported in Whitburn Street. On investigation I found that it had arisen from an unrecognised case in the same house, the disease consequently not having been notified to the Health Department. This case gave rise, altogether, to five cases in this neighbourhood, after which it was stamped out.

Smallpox in
1904.

It will be remembered that on December 24th, 1903, there was an outbreak of Smallpox in Trimdon Street, and in Back Harrison Street on December 26th of that year. On January 7th and 8th, 1904, three cases were removed from Gerald Street, Crescent Row, and Back Harrison Street, being infected by the former case in Back Harrison Street, and this also gave rise to six further cases. On January 9th, a case was reported in Ailesbury Street, which had arisen by contact with the previously-mentioned outbreak in Trimdon Street. On February 1st, a case was notified from Lisburn Terrace, but I have not been able to detect the source whence this arose. On April 30th, a case was imported from South Shields. It occurred in the person of a lady who was playing in a Travelling Orchestra with an Exhibition then visiting Sunderland, and which had visited South Shields the previous week. On May 3rd, an unrecognised (and consequently not notified) case in Warwick Street gave rise to four others in the same house. On June 5th, a case was discovered in Cleveland Road, and this had given rise to another in Hylton Street, which I saw the same day.

REPORT,
1904.

One of these patients was the wife of a sailor, and it is probable that her husband brought the infection from abroad.

On July 11th, a case was reported in a lodging house at the East End of the town. This patient had come from Consett, and had slept in the same room with a person suffering from Smallpox. Two days later another case occurred in another lodging house at the East End; this patient had also come from the neighbourhood of Consett, where the disease was prevalent. A second case occurred in one of these lodging houses on July 25th, being infected from the former case. This patient, when a contact, was offered re-vaccination, but refused. On September 11th, a case was imported from Heckmondwike, in Yorkshire, to Chatsworth Street.

On October 15th, a case occurred in Brandling Street, in the person of the wife of a man who had had a slight eruption, but was not medically attended. No doubt, this was Smallpox, and he not only infected his wife, but also two other persons, one of them being a Tram Conductor.

On October 23rd and November 10th, three cases arose in Trimdon Street, the origin of which I have not been able to trace.

All the cases were removed to the Borough Sanatorium, together with the "contacts" and infected bedding, clothing, etc. The contacts received disinfecting baths at the Sanatorium, and were offered re-vaccination, whilst the infected articles were thoroughly disinfected before being returned. In no case where re-vaccination was performed in time did Smallpox occur in the person of the contacts. All contacts were afterwards visited daily at their homes for three weeks, the maximum incubation period of the disease. This, of course, affords the opportunity of becoming aware of any symptoms of the disease as soon as they appear, when the patient is at once removed. Many hundreds of visits have thus been paid during the different outbreaks in 1904, and it is only by acting on such lines as I have indicated above that a very serious outbreak can be prevented. I feel thankful, that whilst other towns in the neighbourhood had hundreds of cases, Sunderland escaped with 34, and I feel that to a great extent, the small incidence of the disease has been due to the prompt action and assiduous vigilance of the whole of the Staff of the Health Department.

There is still a very large amount of inefficient vaccination, the great majority of parents taking their children to private Medical Practitioners, and having only one mark put on the child's arm, instead of four. During the outbreaks of Smallpox in 1904 I had occasion to re-vaccinate several children only 16 months old who had undergone vaccination previously. I found the so-called vaccination consisted of one mark. On re-vaccinating them in four places every one of them "took," thus showing that the former operation was not efficient. Re-vaccination should be performed at the age of seven years, and again in adolescence, and then we should be able to exclude Smallpox altogether. I have frequently found children, whose ages ranged from 7 to 12, suffering from Smallpox, and in nearly every case they had only one vaccination mark.

REPORT,
1904.

—
Vaccination.

The Health Committee have an arrangement with the University of Durham, College of Medicine, Newcastle-on-Tyne, by which Medical Practitioners practising in the Borough can have examinations made where Phthisis, Diphtheria, or Typhoid Fever is suspected.

Bacterio-
logical
Examinations

The following examinations were made in 1904 :—

Suspected Phthisis, Sputum	...	...	220
„ Diphtheria, Swabs	...	...	20
„ Typhoid, Blood	...	...	5
			—
Total	...		245

In cases of Diphtheria, Anti-Diphtheritic Serum can be obtained free, on application to the Health Office by Medical Men, for the treatment of patients who are unable to pay the extra fees. The use of this Serum has undoubtedly reduced the mortality from Diphtheria in a very marked manner, and thus very many lives have been saved, which, but for this method of treatment would have been sacrificed.

REPORT AS TO PATIENTS SENT BY THE CORPORATION TO THE
CONSUMPTION SANATORIUM, STANHOPE, FROM JUNE,
1901, TO DECEMBER 31st, 1904 :—

During this period 34 cases of Consumption were treated as Corporation patients in the Consumption Sanatorium. Fourteen of these were cavity cases, 10 had extensive consolidation or had complications of other diseases. Ten, only, had consolidation of one lung only, and were suitable cases for permanent benefit.

REPORT,
1904.

Thirty-two of these cases have been discharged, leaving two under treatment.

Of the 32, fifteen are dead, ten are in good health and at work, two are unwell but able to work, two are ill, and three cannot be traced. It will be noticed that all the ten suitable cases, viz., with consolidation of one lung only, are alive and at work.

Houses Let in
Lodgings.

Satisfactory progress continues to be made in the administration of the Bye-Laws with respect to houses let in lodgings, 653 houses are now measured up and registered. They are regularly inspected, and any breach of the Bye-Laws dealt with as it occurs.

Housing of
the Working
Classes.

Two notices were served during the year, and in each case the house was closed by the owner.

Golden Alley.

Negotiations are proceeding for the purchase of a number of insanitary houses which have been closed. It is proposed to demolish these houses and make an open street on the site.

Harrison
Buildings.

Report of the Housing Superintendent, Mr. Joseph D. Ward, for the year 1904, and including the last two months of 1903, from the opening of the Buildings :—

There are 52 tenants, of whom 17 live in three-roomed houses and 35 in two-roomed houses, leaving vacant 19 three-roomed tenements and 13 two-roomed tenements.

The total rent collected amounts to £556 6s. 3d. There is also a further income of £1 1s. 3d., which has been paid for rent of cupboards in No. 1 Block. These are cupboards which have been put in under the stairs, and for which the modest rent of one penny per week is charged.

The population of the Buildings is 234 persons, an average of a little under two persons to every room occupied.

There have been 10 Births and 4 Deaths (infants) :—

1 death was due to Convulsions.

1 „ „ Premature Birth.

1 „ „ Whooping Cough.

1 „ „ Meningitis.

Of the tenants at present living in the Buildings, 13 have occupied houses for 12 months, 8 between 6 and 12 months, 17 between 3 and 6 months, 14 for 3 months and under. REPORT,
1904.

The cleansing of the streets and removal of ashpit refuse, etc., continue to be efficiently dealt with by the Staff of this Department, under Mr. Summers, whose Report is given on pages 19 and 20. It will be noticed on reference to Table P. that the number of applications to have ashpits emptied during the year was only 123, the lowest on record. The work of the Cleansing Department has never been better administered than at the present time. Cleansing
Department.

METEOROLOGICAL OBSERVATIONS, 1904.

Barometrical readings are taken at the Health Office at 9 a.m. daily, and are corrected for temperature, height above sea-level and capillarity.

Readings of the Hygrometer, Maximum and Minimum Thermometers, Rain-gauge and Anemometer are taken at the Mowbray Park daily at 9 a.m.

Bar. = Average Barometer.

Max. T. = Average Maximum Temperature in the Shade.

Min. T. = Average Minimum Temperature.

H. = Average Humidity of the Air.

JANUARY.—

Bar. 29·832 ins. H. = 83·7°. Max. T. = 44·7°. Min. T. = 34·5°. Total amount of Rainfall, 1·96 ins.

West to S.W. winds prevailed during the greater part of this month. This month was decidedly drier than January, 1903.

FEBRUARY.—

Bar. 29·545 ins. H. = 84°. Max. T. = 42·1°. Min. T. = 33·7°. Total amount of Rainfall, 2·22 ins.

West to S.W. winds were prevalent during this month also. February was a much wetter month than February, 1903.

MARCH.—

Bar. 30·00 ins. H. = 77·8°. Max. T. = 44·7°. Min. T. = 35·3°. Total Rainfall, 1·01 in.

The prevailing winds were North and N.E., with a fair amount of S. and S.W. As to rain March, 1904, was about equal to March, 1903.

APRIL.—

Bar. 29·813 ins. H. = 70·5°. Max. T. = 52·9°. Min. T. = 40·0°. Total Rainfall, 1·04 in.

West winds prevailed with a considerable proportion of South to S.W. April, 1904, was a little wetter than April, 1903. The least average humidity occurred this month.

MAY.—

Bar. 29·904 ins. H. = 73·6°. Max. T. = 55·6°. Min. T. = 43·3°. Total Rainfall, 2·65 ins.

For half the month the wind was Northerly to Easterly, whilst for the remaining half it was Westerly and S. Westerly in direction. May, 1904, was a little drier than May, 1903.

JUNE.—

Bar. 30·041 ins. H. = 72·8°. Max. T. = 59·0°. Min. T. = 48·9°. Total Rainfall, 1·46 ins.

For 18 days the prevailing direction of the wind was North to East; for the remainder of the month it was West. June, 1904, was only half as wet as June, 1903.

JULY.—

Bar. 29·935 ins. H. = 73·7°. Max. T. = 65·8°. Min. T. = 53·5°. Total Rainfall, 1·34 ins.

The month was notable for Westerly to Southerly winds, with but a small proportion of East wind. July of 1903 was $3\frac{1}{2}$ times wetter than July of 1904. The highest average Maximum Temperature was recorded this month.

AUGUST. —

Bar. 29·946 ins. H. = 71·5°. Max. T. = 64·6°. Min. T. = 51·3°. Total Rainfall, 2·77 ins.

For more than half the month Westerly winds predominated, with but a small proportion of North and East. A little more rain fell this month than in the corresponding month of the previous year. This month had the greatest rainfall of any month during the year.

SEPTEMBER.—

Bar. 30·067 ins. H. = 76·9°. Max. T. = 60·1°. Min. T. = 47·9°. Total Rainfall, 0·88 in.

West to S.W. winds blew for more than half the month, the remainder being characterised by North and East winds. In September, 1903, three times more rain fell than in September, 1904. September showed the greatest average atmospheric pressure.

OCTOBER.—

Bar. 30.038 ins. H. = 74.1° . Max. T. = 56.0° . Min. T. = 43.3° . Total Rainfall, 0.54 in., being the least of any month during the year.

Westerly to Southerly winds predominated during nearly the whole month, there being only three days when the direction was East. In October, 1903, the quantity of rain which fell was fifteen times greater than in October, 1904.

NOVEMBER.—

Bar. 29.980 ins. H. = 76.2° . Max. T. = 48.4° . Min. T. = 37.6° . Total Rainfall, 2.73 ins.

As regards wind this month was very similar to the last, except that the direction was a little North on several occasions. There were East winds on three days only. As regards rain, November, 1903, and November, 1904, were about equal.

DECEMBER.—

Bar. 29.825 ins. H. = 84.2° . Max. T. = 44.0° . Min. T. = 33.0° . Total Rainfall, 2.10 ins.

The wind was due West for 14 days, S.W. for 8 days, West N.W. for 5 days, and South for 3 days. It was North on one day only. There was considerably more rain in December, 1904, than in December, 1903. The greatest average Humidity occurred this month, and the lowest average Minimum Temperature was recorded.

The total amount of rain in 1904 was 20.7 ins., being 12.95 ins. less than the amount which fell in 1903. The amount of rain which should fall in any one year (taking an average of 10 years) is 27.2 ins. The year 1904 was thus 6.5 ins. below the average. There were 189 days on which no rain fell, and there were four separate weeks which were noted for their dryness, viz., the weeks ending May 21st and October 29th, during which no rain fell, and the weeks ending June 11th and December 24th, when there was a total rainfall of only 0.02 in. and 0.01 in. respectively. October was the driest month of the year; August and November were the wettest. The highest averages for Barometrical Readings were obtained in March, June, September, and October.

The greatest average Humidity of the air occurred in December, being 84.2° . As a rule, the moisture present in the air is only about 70 to 75 per cent. of the amount required for saturation. It will be seen from the accompanying table that the higher percentage was exceeded in January, February and March, September, November and December when the average mean Humidity ranged from 76.9° to 84.2° . July and August were the hottest months, the average mean temperature being 65.8° and 64.6° respectively. December showed the lowest average minimum temperature.

Table showing the average atmospheric pressure, humidity, and temperature for each month of the year 1904, with the total rainfall for each month.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Barometer in inches.....	29.832	29.545	30.000	29.813	29.904	30.041	29.935	29.946	30.067	30.038	29.980	29.825
Humidity	83.7°	84.0°	77.8°	70.5°	73.6°	72.8°	73.7°	71.5°	76.9°	74.1°	76.2°	84.2°
Maximum Shade Temperature.....	44.7°	42.1°	44.7°	52.9°	55.6°	59.0°	65.8°	64.6°	60.1°	56.0°	48.4°	44.0°
Minimum Temperature ...	34.5°	33.7°	35.3°	40.0°	43.3°	48.9°	53.5°	51.3°	47.9°	43.3°	37.6°	33.0°
Amount of Rain in inches	1.96	2.22	1.01	1.04	2.65	1.46	1.34	2.77	0.88	0.54	2.73	2.10

The following is the Report of Work performed by the Inspector of Drains and Sanitary fittings of new houses, during the year :—

REPORT,
1904.

—
Report of the
Inspection of
Drains, etc., of
New Houses.

Number of visits made	3106		
	Water.	Chemicals.	Smoke.
Number of drains tested.....	2460	1	139
Number of tests applied.....	2501	1	144
Number of certificates sent to the Borough Surveyor.....			298
Number of cases where it was found necessary to order concrete foundations for drains.....			458
Approximate length of drains laid.....			18,281 feet.

TABLE A.

The population of the Borough of Sunderland, at the middle of 1904, amounted to 151,093 persons. The distribution of this population among the three Registration Sub-Districts is shown in the following Table :—

	Population.	Area in Acres.	Density of Population per Acre.
Sunderland East.....	55,884	965	57·9
„ West	62,093	1,702	36·4
„ North	33,116	729	45·4
Borough	151,093	3,396	44·5

The census population was 146,077 ; 71 533 being males and 74 494 females. The census populations of the various wards were as follows :—

Bishopwearmouth	9,964	Monkwearmouth-Shore...	10,709
Bridge	12,944	Pallion	8,560
Central	9,433	Park	9,643
Colliery	8,179	Roker	6,975
Deptford	10,501	St. Michael's	8,098
East	9,524	Sunderland	9,829
Hendon.....	5,750	Thornhill	9,230
Monkwearmouth.....	5,869	West.....	10,869

REPORT,
1904.

The number of Marriages registered in the Registration District of Sunderland (which, in addition to the Municipal area, includes the townships of Ford, Tunstall, Ryhope, Fulwell, Southwick, and Hylton) during each of the past ten years is as under :—

Year	No. of Marriages.	Year.	No. of Marriages.
1895	1,368	1900	1,623
1896	1,519	1901	1,625
1897	1,590	1902	1,559
1898	1,754	1903	1,457
1899	1,630	1904	1,545

The Births registered during the year 1904 numbered 5,194, the Birth-rate being 34·3 per 1,000.

The Birth-rates during the 1st, 2nd, 3rd, and 4th quarters were 35·2, 35·3, 34·0, and 32·9 respectively.

The Birth-rate in the 76 large towns of England and Wales was 29·1 per 1,000 of the population.

TABLE B.

Showing the number of Births of Males and Females, together with the Birth-rates, for the 10 years, 1895 to 1904 :—

Year.	Births.			Birth Rate.
	M.	F.	Total.	
1895	2468	2351	4819	35·0
1896	2496	2377	4873	35·4
1897	2519	2386	4905	34·9
1898	2562	2515	5077	35·8
1899	2677	2507	5184	36·1
1900	2720	2536	5256	36·3
1901	2588	2691	5279	36·0
1902	2742	2649	5391	35·7
1903	2598	2597	5195	34·5
1904	2654	2540	5194	34·3

DEATHS.

REPORT,
1904.—
Death-rate.

The deaths registered during the year (including the deaths in the Borough Asylum) numbered 2,935. The death-rate per 1,000 is therefore 19·4.

The Death-rates in the quarters during 1904 were as follows :—

1st quarter—	Deaths,	755...	Rate,	19·8	per 1,000.
2nd	„	„ 678...	„	17·9	„
3rd	„	„ 703...	„	18·6	„
4th	„	„ 799...	„	21·1	„

Table D, on the next page shows the death-rates for 76 Great Towns, as far as the returns are available. Sunderland stands 12th below the highest.

REPORT,
1904.

TABLE D.

TOWNS.	Death Rates per 1000 from all causes.	Death Rate per 1000 from			Diarrhoea Mortality per 1000 Births.	Infant Mortality per 1000 Births.
		Phthisis	Diph- theria	Enteric Fever.		
London	16.10	1.63	0.16	0.06	36.70	144
Croyden	13.80	0.98	0.17	0.03	25.21	129
Willesden	12.22	1.04	0.14	0.05	25.78	115
Hornsey	8.43	0.57	0.85	0.24	14.4	87
Tottenham	11.50	0.61	0.17	0.56	34.93	138
West Ham	16.76	1.40	0.14	0.11	60.00	165
East Ham	13.50	1.18	0.38	0.12	50.80	140
Leyton	13.10	1.20	0.13	0.09	50.00	138
Walthamstow	11.95	0.85	0.24	0.08	50.10	136
Hastings	13.14	1.43	0.03	0.01	13.7	107
Brighton	16.60	1.36	0.13	0.06	18.3	133
Portsmouth	16.88	1.60	0.36	0.17	...	145
Southampton	13.83	1.22	0.11	0.01	17.97	114
Bournemouth	13.6	...	0.10	0.03	...	110
Reading	13.89	0.90	0.19	0.04	58.00	133
Northampton	13.1	1.15	0.10	0.00	26.6	132
Ipswich	15.4	...	0.13	0.10	...	144
Great Yarmouth...	17.02	0.90	0.46	0.06	30.90	165
Norwich	18.2	...	0.07	0.14	...	179
Plymouth	18.74	...	0.11	0.15	30.82	173
Devonport	13.4	...	0.13	0.11	...	115
Bristol	15.44	1.19	0.30	0.04	22.35	134
Hanley	21.2	1.01	0.60	0.10	55.00	206
Burton	15.05	1.46	0.11	0.00	15.00	118
Wolverhampton...	14.61	0.90	0.18	0.12	55.00	152
Walsall	17.8	...	0.22	0.10	...	176
Handsworth	11.8	...	0.23	0.10	...	134
West Bromwich...	15.9	0.80	0.02	0.10	34.00	149
Birmingham	19.3	1.50	0.21	0.07	56.50	195
King's Norton ...	11.02	0.60	0.09	0.03	8.50	102
Smethwick	12.4	0.93	0.08	0.11	20.40	143
Aston Manor	15.8	1.2	0.05	0.10	...	187
Coventry	15.52	1.05	0.14	0.01	17.20	137
Leicester	14.56	1.57	0.03	0.06	48.00	163
Grimsby	16.2	...	0.27	0.19	...	185
Nottingham	17.50	1.31	0.28	0.23	50.00	175
Derby	15.15	1.01	0.25	0.05	18.60	143
Stockport	19.98	1.15	0.16	0.12	63.80	201
Birkenhead	19.87	1.51	0.17	0.11	...	180
Wallasey	16.05	0.89	0.21	0.12	36.90	158
Liverpool	21.90	1.70	0.27	0.11	49.00	196
Bootle	18.61	1.61	0.25	0.04	51.61	180
St. Helens	20.39	1.58	0.24	0.12	24.40	174

TABLE D.—Continued.

REPORT,
1904.

TOWNS.	Death Rates per 1000 from all causes.	Death Rate per 1000 from			Diarrhoea Mortality per 1000 Births.	Infant Mortality per 1000 Births.
		Phthisis	Diph- theria.	Enteric Fever.		
Wigan	19·46	1·08	0·04	0·24	48·00	183
Warrington.....	19·47	1·17	0·06	0·04	15·00	171
Bolton	16·90	1·25	0·16	0·21	32·90	167
Bury.....	17·14	1·66	0·12	0·12	26·00	163
Manchester	21·3	...	0·17	0·12	...	187
Salford... ..	21·00	1·97	0·50	0·20	51·23	193
Oldham	18·30	1·38	0·24	0·16	19·90	155
Rochdale.....	17·7	1·24	0·21	0·08	17·9	152
Burnley	19·5	...	0·12	0·19	...	219
Blackburn	17·20	0·94	0·08	0·15	40·30	192
Preston	17·83	1·06	0·18	0·25	33·49	183
Barrow-in- Furness	12·04	0·69	0·04	0·07	18·40	122
Huddersfield	17·51	1·33	0·15	0·07	...	136
Halifax	15·50	1·20	0·15	0·09	13·40	130
Bradford	17·54	1·38	0·53	0·14	41·41	167
Leeds	17·92	1·40	0·11	0·10	35·90	176
Sheffield	16·82	1·29	0·12	0·12	34·0	159
Rotherham	15·8	...	0·12	0·21	...	164
York... ..	16·18	1·34	0·17	0·17	49·00	170
Hull	18·90	1·20	0·20	0·10	66·70	181
Middlesbrough ...	19·94	1·28	0·11	0·18	38·70	170
Stockton-on-Tees..	17·5	1·26	0·58	0·13	9·0	149
Sunderland	19·40	1·37	0·17	0·22	15·20	165
South Shields.....	18·10	1·52	0·11	0·74	16·70	144
Gateshead	18·5	...	0·12	0·06	...	175
Newcastle-on- Tyne	19·35	...	0·22	0·04	...	156
Tynemouth	19·44	1·28	0·07	0·07	22·69	152
Newport (Mon.)...	15·70	0·96	0·11	0·07	31·40	149
Cardiff	15·20	1·36	0·17	0·05	24·70	144
Rhondda	19·10	0·94	0·26	0·34	46·00	190
Merthyr Tydfil ...	19·70	1·20	0·22	0·25	26·70	186
Swausea	17·70	1·46	0·24	0·05	24·00	172

TABLE G.

REPORT,
1904.Deaths in the four quarters of 1904, compared with
those in the four quarters of 1903, from divers causes.

DISEASES.	1904.				1903.				1904	1903
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total. (52 Weeks.)	Total. (53 Weeks.)
Smallpox	2	...	...	...	...	1	...	1	2	2
Measles	29	18	8	4	2	15	25	79	59	121
Scarlet Fever .....	...	1	1	1	16	15	5	...	3	36
Diphtheria	8	7	5	7	5	7	10	9	27	31
Whooping Cough..	11	20	16	17	19	11	13	5	64	48
Enteric Fever.....	9	8	4	12	7	3	4	8	33	22
Diarrhœa	3	6	131	23	5	10	52	26	163	93
Syphilis	3	2	3	3	2	3	1	2	11	8
Puerperal Fever...	...	1	...	1	2	1	...	...	2	3
Alcoholism .....	...	1	...	...	2	...	1	1	1	4
Rheumatic Fever..	1	3	3	5	2	2	2	...	12	6
Cancer	37	29	34	35	27	25	34	22	135	118
Tabes Mesenterica	12	13	13	13	13	11	5	14	51	43
Tubercular										
Meningitis	9	12	8	13	9	9	2	3	42	23
Phthisis	47	58	50	53	57	80	67	50	208	254
Other Tubercular										
Diseases	11	14	8	8	10	7	5	8	41	30
Premature Birth...	26	27	16	40	23	29	26	24	109	102
Old Age	37	44	26	33	47	27	23	30	140	127
Diseases of the										
Nervous System	95	76	79	86	95	86	79	78	336	338
Diseases of the										
Heart	76	63	41	58	63	59	54	60	238	236
Bronchitis	88	72	29	121	93	79	48	94	310	314
Pneumonia and										
Pleuro Pneumonia	50	41	22	49	48	34	35	46	162	163
Broncho										
Pneumonia	22	19	13	44	18	34	17	30	98	99
Diseases of the										
Digestive System	25	33	57	28	34	39	55	61	143	189
Inflammation of										
the Kidneys and										
Bright's Disease	26	9	10	18	14	14	12	8	63	48
Accident	21	25	21	27	16	22	20	24	94	82
Homicide.....	...	1	1	1	...	...	1	...	3	1
Suicide	1	3	1	3	4	1	3	7	8	15

The Death-rate from the "principal Zymotic Diseases" was 2·40 per 1,000, as compared with 2·49 for the 76 great towns in 1904, and 2·36 for Sunderland in 1903.

REPORT,
1904.
—

Tables H. and J. show the cases notified, and the deaths for several years past.

TABLE H.

Cases of Infectious Diseases notified since 1895. (Compulsory Notification began in Sunderland in September, 1885).

Year.	Smallpox.	Scarlet Fever.	Diphtheria.	Membranous Croup.	Enteric Fever.	Typhus Fever.	Continued Fever.	Erysipelas.
1895	1	470	26	...	840	2	99	..
1896	1	605	26	...	260	...	46	...
1897	3	394	32	...	203	1	29	...
1898	5	726	26	...	452	1	50	...
1899	2	949	19	...	297	...	48	...
1900	2	754	33	17	301	...	32	62
1901	...	744	71	5	244	...	22	98
1902	9	814	56	7	211	...	19	111
1903	32	758	84	10	121	...	14	125
1904	34	198	72	2	128	...	9	117
Average	9	641	44	8	306	4	37	102

TABLE J.

REPORT,
1904.—
Deaths from
Infectious
Diseases,
1895—1904.The annexed return shows the **deaths** from infectious diseases for 10 years (1895 to 1904) :—

Years.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Enteric Fever.	Typhus Fever.	Continued Fever.	Diarrhoea.
1895	...	8	11	8	62	129	2	3	258
1896	.	138	28	6	72	54	...	...	118
1897	...	62	11	5	76	36	1	2	182
1898	1	88	29	11	68	70	...	...	262
1899	...	42	40	9	57	51	...	6	175
1900	...	87	39	22	30	56	...	...	150
1901	...	64	45	29	104	43	...	2	254
1902	1	82	25	14	48	40	...	...	69
1903	2	121	36	31	48	22	...	...	93
1904	2	59	3	27	27	33	...	..	163

TABLE M.

Showing the cases of Infectious Diseases notified in each District in each Quarter, and the Deaths therefrom in 1904.

DISEASES.	Sunderland East Sub-District.					Sunderland West Sub-District.					Sunderland North Sub-District.					Borough.				
	Quarters.				Totals.	Quarters.				Totals.	Quarters.				Totals.	Quarters.				Totals.
	1st	2nd	3rd	4th		1st	2nd	3rd	4th		1st	2nd	3rd	4th		1st	2nd	3rd	4th	
Smallpox { Cases .. Deaths ..	..	1	3	1	5	11	2	1	3	17	5	5	..	2	12	16	8	4	6	34
Scarlet Fever { Cases .. Deaths ..	12	8	10	16	46	17	21	32	21	91	15	12	14	20	61	44	41	56	57	198
Enteric Fever { Cases .. Deaths ..	10	7	5	7	29	7	7	16	10	40	6	14	24	15	59	23	28	45	32	128
Typhus Fever { Cases .. Deaths ..	..	2	1	1	4	4	2	1	3	10	5	4	2	8	19	9	8	4	12	33
Continued Fever { Cases .. Deaths ..	1	..	..	..	1	3	1	1	1	6	..	..	2	..	2	4	1	3	1	9
Diphtheria and Mem. Croup { Cases .. Deaths ..	6	2	2	3	13	9	7	11	11	38	8	5	8	2	23	23	14	21	16	74
Puerperal Fever { Cases .. Deaths ..	..	..	..	..	..	5	4	2	4	15	2	2	1	1	6	8	7	5	7	27
Total { Cases .. Deaths ..	29	18	20	28	95	47	39	63	46	195	34	36	48	39	157	110	93	131	113	447
	1	3	3	5	12	11	7	4	7	29	7	7	3	9	26	19	17	10	21	67

REPORT, THE BOROUGH SANATORIUM FOR
1904.
—
INFECTIOUS DISEASES.

Infectious
Diseases.

During the year 217 cases of Infectious Disease were admitted to the Sanatorium (including a sailor removed from a ship in the port). The following table shows the admissions during the last ten years :—

TABLE N.

	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Smallpox	1	...	4	6	2	2	...	10	32	34
Measles	1	...	...	...	...	...	...	...	...	...
Scarlet Fever.....	130	213	104	188	257	226	183	210	193	94
Diphtheria	1	1	3	1	...	...	...	...	...	...
Typhus Fever.....	1	...	...	...	...	...	...	...	...	...
Enteric and Con- tinued Fever....	343	123	117	238	195	208	144	130	88	92
Totals.....	477	337	228	433	454	436	327	350	313	219

The following table shows that 49·4 per cent. of the notified cases were treated in the Sanatorium, being 19·3 per cent. more than in the previous year.

TABLE O.

REPORT,
1904.

DISEASE.	1903.			1904.		
	Cases Notified.	Admitted to Hospital.		Cases Notified.	Admitted to Hospital.	
		Number.	Percentage of Total Cases Notified.		Number.	Percentage of Total Cases Notified.
Smallpox	32	32	100	34	34	100
Enteric Fever	121	81	67	128	84	66
Typhus Fever .....	...	...	...	...	...	...
Continued Fever	14	7	50	9	7	78
Scarlet Fever	758	193	25·4	198	94	47
Diphtheria	84	...	...	72	...	...
Memb. Croup	10	...	...	2	...	...
TOTALS	1019	313	30·7	443	219	49·4

Of the 91 cases of Enteric and Continued Fever treated at the Sanatorium during the year, 18 died, being 19·8 per cent of the cases treated ; while of the 46 cases treated at home 15 died, being 35·0 per cent. of the cases. It will thus be seen that the Fatality of Enteric Fever patients treated at the Sanatorium is very much less than in the case of patients treated at home when suffering from that disease.

Comparison of
Sanatorium
and Home
Treatment.

The following figures show the death-rate in the Sanatorium for the past ten years :—

1895—	Patients admitted,	446,	of whom	49	died,	or	11·2	per cent.
1896—	“	“	337,	“	24	“	“	7·1
1897—	“	“	228,	“	18	“	“	7·9
1898—	“	“	433,	“	40	“	“	9·2
1899—	“	“	454,	“	36	“	“	7·9
1900—	“	“	436,	“	42	“	“	9·6
1901—	“	“	327,	“	35	“	“	10·7
1902—	“	“	350,	“	30	“	“	8·6
1903—	“	“	313,	“	27	“	“	8·6
1904—	“	“	219,	“	22	“	“	10·0

CLEANSING DEPARTMENT.

REPORT,
1904.

—
Cleansing
Department.

At the end of the year there were in the Borough about 8,200 houses supplied by water-closets only, about 600 furnished with water-closets and privies and ashpits, about 500 with water-closets and ash-closets, and about 100 with waste water-closets. There were about 7,200 supplied by privies and ashpits, about 5,630 by ash-closets, and about 510 by pan-closets.

There is an increase in the number of inhabited houses, namely, 303.

The number of applications to have ashpits cleansed was 123, as compared with 145 for the previous year. The number of applications is a good gauge of the regularity shown in the cleansing of the ashpits, and it is satisfactory to be able to state that the number of applications last year was the lowest on record.

The last column in Table R. shows what great improvement has been effected in the last five years as compared with previous years.

Return showing the number of Ash-pits Cleansed ;
also Inhabited Houses, Population, &c., for Ten Years
(1895-1904).

REPORT,
1904.
—
Cleansing
Depart-
ment.

TABLE P.

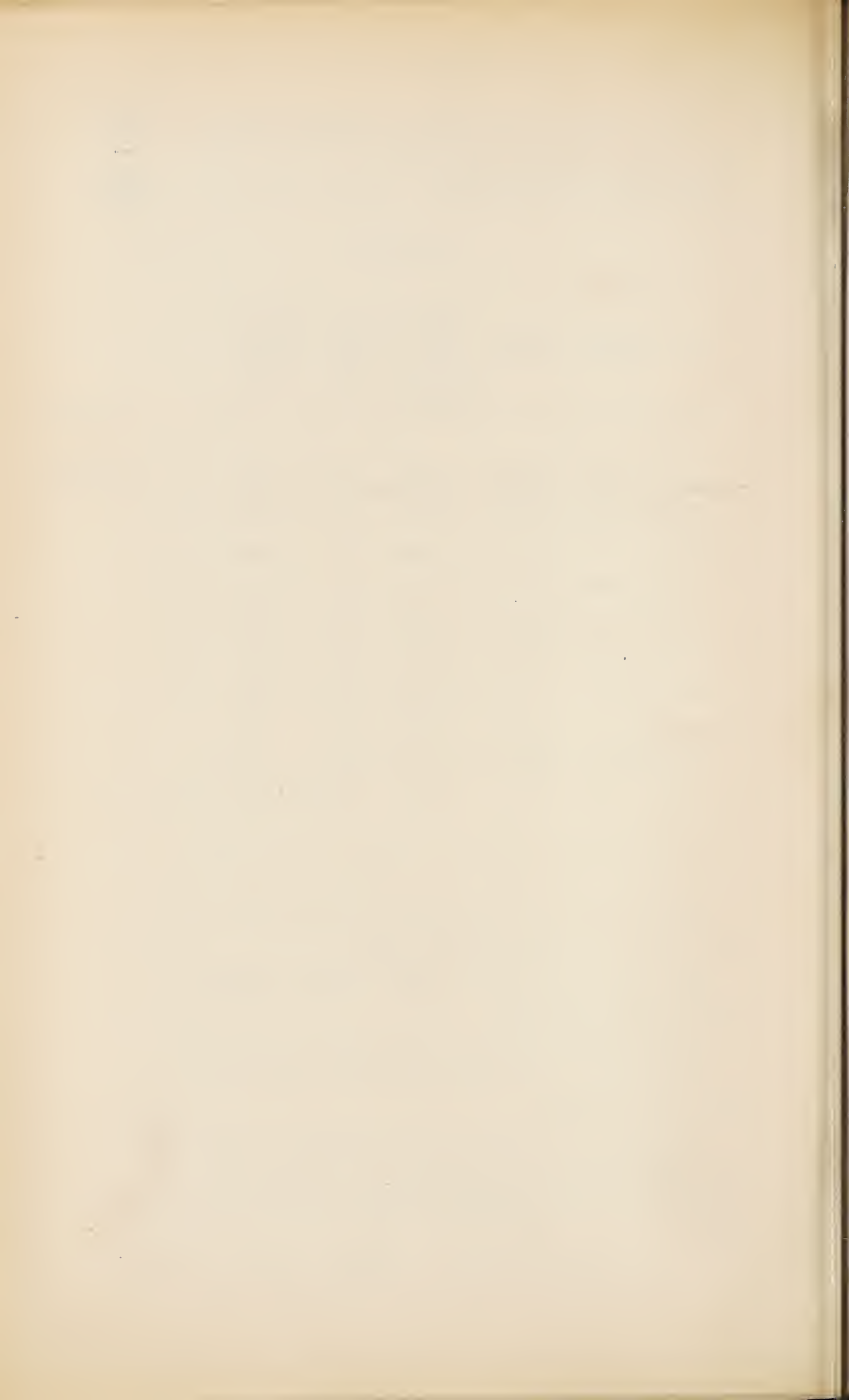
Year.	No. of Inhabited Houses.	No. of Ash-pits Cleansed.	No. of Loads of Refuse Removed from Ash- pits, Ash- closets and Bins.	Average No. of Horses Employed Daily.	Applications received at Office to empty Ash-pits.
1895	19,482	146,864	73,883	34 $\frac{1}{4}$	4,719
1896	19,721	162,908	75,129	36	3,159
1897	19,991	195,892	74,553	37 $\frac{1}{2}$	1,841
1898	20,229	228,279	74,305	38	1,029
1899	20,639	229,343	74,898	40 $\frac{1}{2}$	1,046.
1900	21,078	238,860	78,350	44 $\frac{1}{2}$	1,130
1901	21,473	241,577	72,886	44 $\frac{1}{2}$	939
1902	22,110	243,565	72,584	43 $\frac{1}{2}$	426
1903	22,405	245,671	70,487	43 $\frac{1}{2}$	154
1904	22,798	253,459	68,036	42 $\frac{1}{2}$	123

14,699 loads of road sweepings, and 4,311 loads of snow also were removed during the year.

The number of tanks of water used for watering paved streets was 14,044.

During the twelve months 48,333 loads of refuse were sent to sea by hopper.

In addition to the loads of refuse referred to in the table, 50,487 bags of paper have been collected and burnt.



APPENDIX.

VITAL & SANITARY STATISTICS,

INCLUDING THE

NEW TABLES REQUIRED BY THE LOCAL
GOVERNMENT BOARD.

1904.

TOGETHER WITH

ABSTRACTS FOR 10 YEARS, 1895-1904.

TABLE I.

Showing the Population, Inhabited Houses, Marriages, Births, and Deaths for the year **1904**, and 10 years preceding.

GROSS NUMBERS.

The Year.	Estimated Population. *	No. of Inhabited Houses.	Marriages.	Registered Births.	Registered Deaths.	Deaths in Public Institutions.
1904	151,093	22,798	1,545	5,194	2,935	464
1894	136,200	19,272	1,356	4,760	2,815	272
1895	137,620	19,482	1,368	4,819	2,990	356
1896†	139,055	19,721	1,519	4,873	2,784	322
1897†	140,505	19,991	1,590	4,905	2,777	313
1898	141,970	20,229	1,754	5,077	3,236	377
1899	143,450	20,639	1,630	5,184	3,113	462
1900	144,945	21,078	1,623	5,256	3,147	405
1901	146,456	21,473	1,625	5,279	3,123	401
1902‡	147,983	22,110	1,550	5,391	2,914	456
1903	149,526	22,405	1,457	5,195	2,970	481
Average of 10 Years, 1894-03.	142,771	20,640	1,547	5,074	2,987	384

NOTES.

- 1.—Population of Census, 1901 = 146,077.
- 2 —Average Number of Persons in each House at Census, 1901 = 6·8.
- 3.—Area of Borough in Acres—3,396, exclusive of tidal water and foreshore, but including the docks.
- 4.—Average Number of Persons living on each acre at Census, 1901 = 43·0.
- 5.—The Marriages refer to the Registration District of Sunderland, which, in addition to the Municipal area, includes the townships of Ford, Tunstall, Ryhope, Fulwell, Southwick, and Hylton.

* For Statistical purposes the Registrar General estimates the Population to the middle of the year, on the basis of rate of increase ruling between the two preceding census periods. The estimate of population may be checked to a certain extent by the known number of inhabited houses, and by the average number of inmates per house, as ascertained at the preceding census.

† In these years there were 53 weeks, therefore, in calculating annual rates from the figures given or the population, care should be taken to add a fifty-second part to them to get the true ratios.

‡ In the year 1897 the deaths occurring in the Borough Asylum were included amongst the total deaths for the first time.

TABLE II.

Showing the ANNUAL BIRTH and DEATH-RATES, DEATH-RATES OF CHILDREN, proportion of DEATHS IN PUBLIC INSTITUTIONS n 1000 Deaths for the year 1904 and 10 years preceding.

In Year. 1	Birth Rates per 1000 of the Population. 2	Death Rates per 1000 of the Population. 3	Deaths of Children under 1 Year per 1000 of Registered Births. 4	Deaths of Children under 1 Year per 1000 of Total Deaths. 5	Deaths of Children under 5 Years per 1000 of Total Deaths. 6	Deaths in Public Institutions per 1000 of Total Deaths. 7
1904	34·31	19·42	165	292	429	158
1894	34·94	20·67	168	285	469	96
1895	35·02	21·72	191	312	452	119
1896†	35·38	19·64	161	282	463	115
1897	34·91	19·76	168	296	442	113
1898	35·76	22·79	202	317	490	116
1899	36·13	21·70	175	293	438	148
1900	36·26	21·71	169	282	437	128
1901	36·04	21·32	179	302	543	128
1902†	35·74	19·32	153	283	426	153
1903	34·47	19·86	157	274	446	162
Average of 10 Years, 1894-1903	35·46	20·85	172	293	460	128

† There were 53 weeks in these years, and the rates have therefore been corrected for the extra week.

TABLE III.—CONTINUED.

V.

CAUSES OF DEATH.	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and upwards.	Totals.
Premature Birth	109												109
Injury at Birth	12												12
Debility at Birth.. .. .	99												99
Atelectasis	5												5
Congenital Defects	24												24
Want of Breast Milk													
Atrophy, Debility, Marasmus	78	21	1										100
Dentition	10	7											17
Rickets	2	1											3
Old Age, Senile Decay								3	35	72	29	1	140
Convulsions	55	7											62
Meningitis	17	14	6	8		2							47
Encephalitis													
Apoplexy						3	24	28	40	18			113
Softening of Brain							1	1	3				5
Hemiplegia, Brain Paralysis					1	2	3	9	8	8	1		32
General Paralysis of the Insane				1	3	5	3	2					14
Other Forms of Insanity						4	5	2	5	2			18
Chorea													
Cerebral Tumour.. .. .			1		1	2							4
Epilepsy				3		2	2	2					9
Laryngismus Stridulus	2	1											3
Locomotor Ataxy					1		1						2
Paraplegia, Diseases of Spinal Cord					2	4	1	6	3	1			17
Other and Ill-defined Diseases of Brain or Nervous System.. .. .		3	1			2	1	2	1				10
Otitis, Otorrhœa	2	1	2	1	1								7
Diseases of Nose, Epistaxis													
Diseases of Eye, Ophthalmia.. .. .													
Endocarditis, Valvular Diseases of Heart		1	1	1	8	4	9	13	5	1			43
Pericarditis													
Hypertrophy of Heart													
Angina Pectoris						1				1			2
Aneurism							2						2
Senile Gangrene								2	3	5			10
Embolism, Thrombosis.. .. .				1				2	3	1			7
Phlebitis					1								1
Varicose Veins													
Other and Ill-defined Diseases of Heart and Circulatory System		1	8	14	10	20	33	37	53	14	3		193
Laryngitis	1	3	1					1					6
Croup		1											1
Other Diseases of Larynx and Trachea													
Acute Bronchitis.. .. .	115	47	2	1	2	8	16	29	26	20	2	1	269
Chronic Bronchitis					1	4	1	12	13	4	1		41
Lobar Croupous Pneumonia		3	2	2	2	3	4	2	1				19
Lobular Broncho-Pneumonia	44	46	1		2		2		3				98
Pneumonia, form not stated	12	21	3	12	11	16	18	22	23	5			143
Emphysema, Asthma						1	1	2	2				6
Pleurisy		1		1	1			2					5
Other and Ill-defined Diseases of the Respiratory System					1		1	1					3
Diseases of Mouth and Annexa..	2	3	1	1									7
Diseases of Pharynx													
Diseases of Esophagus.. .. .													
Ulcer of Stomach and Duodenum					1	3	2	1					7
Other Diseases of Stomach	16	5	1	2		2	2	1	2	1			32
Enteritis	25	5					2	1	1	1			35
Appendicitis			2	6		1							9
Obstruction of Intestine	2		1	2	1		1	1	5	1			14
Other Diseases of Intestine		1		1			1	1					4
Cirrhosis of Liver					2		8	4	2				16
Other Diseases of Liver							1	2	4				7
Peritonitis	1	1	1	2			2	2					9
Other and Ill-defined Diseases of Digestive System	2							1					3

TABLE III.—CONTINUED.

CAUSES OF DEATH.	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and upwards	Totals.
Diseases of Lymphatic System and Ductless Glands					1	2		2					5
Acute Nephritis		2	2		4	1	5	5	3				22
Bright's Disease		2	1	2	2	4	8	12	8	2			41
Calculi			1			1							2
Diseases of Bladder and Prostate								3	5	3			11
Other and Ill-defined Diseases of Urinary System													
Diseases of Testis and Penis													
Diseases of Ovaries													
Diseases of Uterus and Appendages					1								1
Diseases of Vagina and External Genital Organs													
Diseases of Breast													
Abortion, Miscarriage													
Puerperal Mania													
Puerperal Convulsions				2	2								4
Placenta Prævia, Flooding					1	2							3
Puerperal Thrombosis													
Other and Ill-defined Accidents and Diseases of Pregnancy and Child Birth				1	1								2
Arthritis, Ostitis, Periostitis				1						1			2
Other and Ill-defined Diseases of the Osseous System													
Ulcer, Bedsore						1							1
Eczema													
Pemphigus													
Other and Ill-defined Diseases of Integumentary System													
Accident or Negligence													
In Mines and Quarries			1	1		1							3
In Vehicular Traffic		4		2	1	1			1				9
On Railways					1				1				2
On Ships, Boats, and Docks (excluding Drowning)				3				3					6
In Building Operations				1	1								2
By Machinery													
By Weapons and Implements													
Burns and Scalds	1	2	7	3	1	1	1		1	2			19
Poisons, Poisonous Vapours							1						1
Surgical Narcosis						1							1
Effects of Electric Shock													
Corrosion by Chemicals													
Drowning			1	4	1	2	2	1	1				12
Suffocation, Overlaid in Bed	11												11
Suffocation, otherwise			1					1					2
Falls, not specified			1	2	3	3	2	1	2		1		15
Weather Agencies							3	2	1	1			11
Otherwise, and not stated				1		3	3	2	1	1			11
Homicide	1				1	1							3
Suicides—													
By Poison									1				1
By Asphyxia													
By Hanging and Strangulation					1	1	2						4
By Drowning													
By Shooting													
By Cut or Stab				1			1		1				3
By Precipitation from Elevated Places													
By Crushing													
By other and Unspecified Methods													
Execution													
Sudden Death (Cause not Ascertained)													
Other Ill-defined and not Specified Causes	4				1	1	1	1					8
TOTALS	857	400	130	164	150	188	243	238	301	179	38	2	2935

TABLE IIIA.
SHOWING THE DEATHS FROM ALL CAUSES REGISTERED IN
EACH DISTRICT, 1904.

CAUSES OF DEATH.	Sunderland East.			Sunderland West.			Sunderland North.			Totals
	Under 1.	1 to 5.	Over 5.	Under 1.	1 to 5.	Over 5.	Under 1.	1 to 5.	Over 5.	
Smallpox { Vaccinated	2	..	..	..	2
Unvaccinated
No Statement
Measles	3	20	4	1	5	2	6	18	..	59
Scarlet Fever	1	..	..	1	..	..	1	..	3
Typhus Fever
Epidemic Influenza	4	..	..	6	..	..	..	10
Whooping Cough	11	14	1	11	23	1	..	3	..	64
Diphtheria, Membranous Croup	5	1	..	8	7	..	5	1	27
Enteric Fever	4	..	1	9	..	1	18	33
Asiatic Cholera
Diarrhœa, Dysentery	22	6	1	36	8	1	21	4	..	99
Epidemic or Zymotic Enteritis	9	10	..	27	6	..	8	4	..	64
Other Allied Diseases
Hydrophobia
Glanders, Farcy
Tetanus
Anthrax, Splenic Fever
Cowpox, Accidents of Vaccination
Syphilis	6	..	..	2	1	2	..	..	..	11
Gonorrhœa
Phagedœna
Erysipelas	3	2	..	..	..	..	..	5
Puerperal Fever	1	..	..	1	..	..	..	2
Pyæmia, Septicæmia	1	..	..	..	1
Infective Endocarditis	1	..	..	..	..	..	..	1
Other Allied diseases
Malarial Fever
Rheumatic fever	4	..	..	5	..	..	2	11
Rheumatism of the Heart	1	..	..	..	..	..	..	1
Tuberculosis of Brain or Meninges, Acute Hydrocephalus	7	8	4	5	7	6	1	2	2	42
Tuberculosis of Larynx	1	..	..	..	..	..	2	3
Tuberculosis of Lungs	1	81	3	..	72	..	2	49	208
Tuberculosis of Intestines, Tabes Mesenterica	7	7	8	6	8	5	6	2	2	51
General Tuberculosis, Tubercular Disease of Undefined Position	1	5	2	..	4	7	..	1	8	28
Other Forms of Tuberculosis, Scrofula	1	..	2	2	1	2	..	..	2	10
Other Infective Diseases
Thrush
Actinomycosis
Hydatid Diseases
Scurvy
Other Diseases due to Altered Food
Acute Alcoholism, Delirium Tremens	1	..	..	1	..	..	..	2
Chronic Alcoholism	1	..	..	1	..	..	..	2
Chronic Industrial Poisoning
Other Chronic Poisonings
Osteo-arthritis, Rheumatoid Arthritis	1	..	..	..	..	..	..	1
Gout
Cancer	49	..	..	51	..	1	34	135
Diabetes Mellitus	2	..	..	2	..	..	1	5
Purpura Hemorrhagica	1	1	..	..	..	..	..	..	2
Hæmophilia
Anæmia, Leucocythæmia	1	..	1	..	..	..	..	..	2
Lymphadenoma, Hodgkin's Disease

TABLE IIIA.—CONTINUED.

CAUSES OF DEATH.	Sunderland East.			Sunderland West.			Sunderland North.			Totals.
	Under 1.	1 to 5.	Over 5.	Under 1.	1 to 5.	Over 5.	Under 1.	1 to 5.	Over 5.	
Premature Birth	43	.....	.....	49	.....	.....	17	.....	.....	109
Injury at Birth	7	.....	.....	4	.....	.....	1	.....	.....	12
Debility at Birth	37	.....	.....	31	.....	.....	31	.....	.....	99
Atelectasis	2	.....	.....	1	.....	.....	2	.....	.....	5
Congenital Defects	5	.....	.....	12	.....	.....	7	.....	.....	24
Want of Breast Milk .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Atrophy, Debility, Marasmus	26	14	1	28	2	.....	24	5	.....	100
Dentition	3	4	.....	7	1	.....	.....	2	.....	17
Rickets	1	1	.....	.....	.....	.....	1	.....	.....	3
Old Age, Senile Decay .. .. .	.....	.....	53	.....	.....	42	.....	.....	45	140
Convulsions	25	1	.....	19	3	.....	11	3	.....	62
Meningitis	4	6	6	4	4	6	9	4	4	47
Encephalitis .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Apoplexy .. .. .	.....	.....	51	.....	.....	45	.....	.....	17	113
Softening of the Brain .. .. .	.....	.....	1	.....	.....	2	.....	.....	2	5
Hemiplegia, Brain Paralysis .. .. .	.....	.....	18	.....	.....	12	.....	.....	2	32
General Paralysis of the Insane .. .. .	.....	.....	6	.....	.....	6	.....	.....	2	14
Other Forms of Insanity .. .. .	.....	.....	10	.....	.....	6	.....	.....	2	18
Chorea .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cerebral Tumour .. .. .	.....	.....	2	.....	.....	1	.....	.....	1	4
Epilepsy .. .. .	.....	.....	5	.....	.....	3	.....	.....	1	9
Laryngismus Stridulus .. .. .	.....	.....	.....	1	.....	.....	1	1	.....	3
Locomotor Ataxy .. .. .	.....	.....	.....	.....	.....	1	.....	.....	1	2
Paraplegia, Diseases of Spinal Cord .. .. .	.....	.....	8	.....	.....	8	.....	.....	1	17
Other and Ill-defined Diseases of Brain or Nervous System .. .. .	.....	1	2	.....	1	3	.....	1	2	10
Ottis, Otorrhœa	1	.....	2	.....	1	1	1	.....	1	7
Diseases of Nose, Epistaxis .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diseases of Eye, Ophthalmia .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Endocarditis, Valvular Diseases of Heart .. .. .	.....	.....	13	.....	1	17	.....	.....	12	43
Pericarditis .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hypertrophy of Heart .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Angina Pectoris .. .. .	.....	.....	1	.....	.....	1	.....	.....	.....	2
Aneurism .. .. .	.....	.....	1	.....	.....	.....	.....	.....	1	2
Senile Gangrene .. .. .	.....	.....	7	.....	.....	2	.....	.....	1	10
Embolism, Thrombosis .. .. .	.....	.....	1	.....	.....	.....	.....	.....	6	7
Phlebitis .. .. .	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Vericose Veins .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other and Ill-defined Diseases of Heart and Circulatory System .. .. .	.....	1	72	.....	.....	72	.....	.....	48	193
Laryngitis .. .. .	.....	2	1	1	1	1	.....	.....	.....	6
Croup .. .. .	.....	.....	.....	.....	1	.....	.....	.....	.....	1
Other Diseases of Larynx and Trachea .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Acute Bronchitis	64	27	50	31	15	42	20	5	15	269
Chronic Bronchitis .. .. .	.....	.....	14	.....	.....	20	.....	.....	7	41
Lobar Croupous Pneumonia .. .. .	.....	1	3	.....	1	4	.....	1	9	19
Lobular Broncho-Pneumonia	15	21	3	16	10	3	13	15	2	98
Pneumonia, form not stated	7	10	48	5	8	44	.....	3	18	143
Emphysema, Asthma .. .. .	.....	.....	.....	.....	.....	4	.....	.....	2	6
Pleurisy .. .. .	.....	.....	1	.....	1	3	.....	.....	.....	5
Other and Ill-defined Diseases of the Respiratory System .. .. .	.....	.....	1	.....	.....	2	.....	.....	.....	3
Diseases of Mouth and Annexa	2	1	1	.....	1	1	.....	1	.....	7
Diseases of Pharynx .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diseases of Oesophagus .. .. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ulcer of Stomach and Duodenum .. .. .	.....	.....	6	.....	.....	1	.....	.....	.....	7
Other Diseases of Stomach	11	4	6	5	1	4	.....	.....	1	32
Enteritis	14	1	1	5	1	3	6	3	1	35
Appendicitis .. .. .	.....	.....	3	.....	.....	1	.....	.....	5	9
Obstruction of Intestine .. .. .	.....	.....	6	2	.....	3	.....	.....	3	14
Other Diseases of Intestine .. .. .	.....	.....	.....	.....	1	3	.....	.....	.....	4
Cirrhosis of Liver .. .. .	.....	.....	6	.....	.....	6	.....	.....	4	16
Other Diseases of Liver .. .. .	.....	.....	4	.....	.....	2	.....	.....	1	7
Peritonitis .. .. .	.....	.....	4	1	.....	2	.....	1	1	9
Other and Ill-defined Diseases of Digestive System .. .. .	.....	.....	.....	2	.....	.....	.....	.....	1	3

TABLE IIIA.—CONTINUED.

CAUSES OF DEATH.	Sunderland East.			Sunderland West.			Sunderland North.			Totals.
	Under 1.	1 to 5.	Over 5.	Under 1.	1 to 5.	Over 5.	Under 1.	1 to 5.	Over 5.	
Diseases of Lymphatic System and Ductless Glands			1			3			1	5
Acute Nephritis			9		2	7			4	22
Bright's Disease		1	13			19		1	7	41
Calculus			1			1				2
Disease of Bladder and Prostate			3			5			3	11
Other and Ill-defined Diseases of the Urinary System										
Diseases of Testis and Penis										
Diseases of Ovaries										
Diseases of Uterus and Appendages									1	1
Diseases of Vagina and External Genital Organs										
Diseases of Breast										
Abortion, Miscarriage										
Puerperal Mania										
Puerperal Convulsions			2			1			1	4
Placenta Prævia, Flooding			2						1	3
Puerperal Thrombosis										
Other and Ill-defined Accidents and Diseases of Pregnancy & Child Birth			1						1	2
Arthritis, Ostitis, Periostitis			1			1				2
Other and Ill-defined Diseases of the Osseous System										
Ulcer, Bed sore						1				1
Eczema										
Pemphigus										
Other and Ill-defined Diseases of Integumentary System										
Accident or Negligence—										
In Mines and Quarries									3	3
In Vehicular Traffic		1	2		2	1		1	2	9
On Railways						1			1	2
On Ships, Boats, and Docks (excluding Drowning)			4			2				6
In Building Operations										
By Machinery			1			1				2
By Weapons and Implements										
Burns and Scalds		1	9	1		6		1	1	19
Poisons, Poisonous Vapours						1				1
Surgical Narcosis						1				1
Effects of Electric Shock										
Corrosion by Chemicals										
Drowning			9			2			1	12
Suffocation, Overlaid in Bed	2			6			3			11
Suffocation, otherwise						2				2
Falls, not Specified			3			9			3	15
Weather Agencies										
Otherwise, and not stated			3			6			2	11
Homicide	1		1						1	3
Suicides—										
By Poison									1	1
By Asphyxia										
By Hanging and Strangulation			2			2				4
By Drowning										
By Shooting										
By Cut or Stab			1			2				3
By Precipitation from Elevated Places										
By Crushing										
By Other and Unspecified Methods										
Execution										
Sudden Death (Cause not Ascertained).										
Other Ill-defined and not Specified Causes	3		3				1		1	8
TOTALS	340	177	668	327	131	635	190	92	375	2935

TABLE IV.

STREETS in which ZYMOTIC DISEASES were known to have occurred in the
Year 1904.

SUNDERLAND EAST.

Street.	CASES NOTIFIED.						Removed to Sanatorium.	Deaths.	DEATHS FROM		
	Smallpox.	Enteric Fever.	Typhus Fever.	Continued Fever.	Scarlet Fever.	Diphtheria.			Measles.	Whooping Cough.	Diarrhea.
Ann street	1	...	...	...	...	...	1	...	...	...	...
Arras lane	1	...	...	...	...	1	...	...	...	...
Athol road	3	...	...	...	...	...	...
Barrack street	3	...	...	...	1	...	1
Beauclerc terrace	1	...	...	...	...	...	...
Burleigh street	1	...	...	...	...	1	...	1	1	4
Belle Vue.....	4	...	...	...	...	...	...
Cairo street	1	...	1	...	...	...	1
Charles street	1	...
Churchill street	1	...	...	...	...	...
Church street	3	...	...	...	...	...	3	...	...	...	...
Commercial road.....	...	1	...	...	...	...	1	...	1	1	...
Coronation street	2	1	...
Covent Garden street.....	2	...
Coxon street	1	...	...	...	...	...	...
Cross place	1	...	1	...	...	...
Cumberland terrace	1	...	1	...	1	...	...
East Cross street	1
East street	1
Ethel street.....	1	...	1	...	...	...	...
Ettrick place	1	...	...
Flag lane	1	...
Ford street	1
Fowler terrace	1	...	...	1	...	1	1	...	...	...
George street	1	1	...	...	...	...	2	1	...	...	...
Golden alley.....	1
Grange street South	1	...	...	...	...	...
Gray road.....	5	...	...	...	...	...	...
Grey terrace.....	1	...	...	...	...	...	...
Harrison buildings.....	1	...	...	...	...	1	...
Hartley street.....	1	...	1	...	...	...	1
Hastings street	1	...	...	1	...	...	...	...
Havelock street	1
Hedworth street.....	1	...	...

TABLE IV.—CONTINUED.

Street.	CASES NOTIFIED						Removed to Sanatorium.	Deaths.	DEATHS FROM		
	Smallpox.	Enteric Fever.	Typhus Fever.	Continued Fever.	Scarlet Fever.	Diphtheria.			Measles.	Whooping Cough.	Diarrhoea.
Hendon road	1	...	...	...	...	...	1	...	...	...	...
Hendon street.....	1	1	1
Herrington street	1	...	...	...	1	1	...	1	...	...
High street East.....	...	1	...	...	...	1	1	...	...	1	4
John street	1	...	...	...	...	...	...
Lawrence street	1	...	1	...	...	...	...
Lawton street	1	...	1	...	...	...	...
Lilburne street	1	...
Lodge terrace	1	...	1	...	...	...
Lombard street	1
Lucknow street	1	...	...	...	...	...	...	...	...	...
Mainsforth terrace West	..	1	...	...	3	...	2	...	...	...	...
Maling's rigg	2
Mark quay	1
Moorgate street	1
Moor street.....	..	1	...	...	...	...	1	...	...	...	...
Mordey street.....	2	1	...
Murton street	1	...	...	...	...	...	...	...	...	...
Nelson street	1	...	...	1	...	...	...	...	...	...
Nesham square	1	...	1	...	...	1	...
New Grey street..	1	1
Nicholson street.....	1	...	...
Nile street	1	...	...	3	...	4	...	...	...	2
Norfolk street.....	1	...	...	...	...	...	...
Norman street.....	...	2	...	...	...	...	2	...	1	1	...
Northumberland place	1
Outram street.....	1
Page street	2	...	...
Park terrace	2	...	1	...	...	...	...
Queen street	1	1	...
Railway street.....	1	...
Randolph street	1	...	...	...	...	...	...
Regent's terrace	1	...	...	...	...	...
Robinson street	1	...	...	1	...	2	1	1	...	...
Robinson terrace	1	...	...	1	...	1	...	...	...	1
Salem street	1	...	...	...	...	...	...	...	...	...
Salem terrace	1	...	...	...	...	...	...
Sans street	1	...
Silver street.....	1	...	1	...	1	...	...
South Durham street.....	3
Spring Garden lane	1	1	1
Stafford street.....	1
Suffolk street	1	...
Sunderland street	1	...
Sussex street	1	...	...	...	...	1	...	1	...	...
Tatham street.....	1	1	1	1	...	...	...
Tavistock place	1	...
Tees street	1	...	...	...	...	1	...	...	...	...

TABLE IV — CONTINUED.

SUNDERLAND WEST.

Street.	CASES NOTIFIED.						Removed to Sanatorium.	Deaths.	DEATHS FROM		
	Smallpox.	Enteric Fever.	Typhus Fever.	Continued Fever.	Scarlet Fever.	Diphtheria.			Measles.	Whooping Cough.	Diarrhoea.
Abingdon street	1	...	...	4	...	...	...	...	...	...
Ailesbury street	1	...	...	...	...	...	1	...	...	...	...
Albert street	1	...	...	...	...	1	...	...	...	1
Alderson street	1
Alfred street	1	...	...	...	1	1	...	...	1	2
Alliance street.....	...	1	...	...	...	...	1	...	...	...	...
Anne street	1
Argyle square	1	...	...	...	...	...	...
Ashbrooke road	1	...	1	...	...	...	...
Aylmer street	1	...	1	...	...	...
Ayre's Quay street.....	...	1	...	...	...	...	...	1	...	...	1
Azalea terrace	2	...	...	...	...	...	...
Barnard street	1	...	1	...	...	...	...
Bell street	1	1	...
Bennett street.....	1	...
Bexley street	1	...	...	...	...	...
Blandford street.....	2	...	2	...	...	...	...
Brady street	1	...	...	...	...	...	...
Brougham street.....	...	1	...	...	2	...	...	...	...	...	1
Burnville road.....	...	1	...	...	1	...	...	...	...	...	...
Carlyon street	1	...	1	...	...	...	...
Carol street...	1	...	1	...	...	...	...
Catherine street	1	...	...	...	...	1	...	...	...	...
Cecil street	1	...	...	...	...	...	...	...	...	...
Charles street West.....	...	1	...	...	...	...	1	...	1	...	1
Chatsworth street	1	1	...	...	1	...	3	1	...	...	...
Chester road.....	1
Chester road West	1	...
Chester street East.....	...	1	...	...	...	...	1	...	...	...	...
Chester terrace	1
Church street West.....	...	1	...	...	...	...	...	...	...	...	...
Clanny street	2	...	1	...	...	1
Claremont terrace	1	...	...	...	...	...	...
Cleveland road	1	...	...	...	...	1	1	1	...	...	...

TABLE IV.—CONTINUED.

Street.	CASES NOTIFIED.						Removed to Sanatorium.	Deaths.	DEATHS FROM		
	Smallpox.	Enteric Fever.	Typhus Fever.	Continued Fever.	Scarlet Fever.	Diphtheria.			Measles.	Whooping Cough.	Diarrhea.
Cornwall street	1	...	1	...	...	1
Crescent row	1	1	...	...	...	...	2	...	1	...	2
Cromwell street	1
Crowtree road	1	...	1	...	...	...	...
Dean street	1	...	...	...	...	1
Duke street	1	...
Duncan street	1	...	...	1	...	1	...	...	1	...
Earl street	1	...
East Moor road	2	...	2	...	...	...	...
Eden Vale	1	...	...	...	...	...	1
Edwin street	1
Elmwood street	1
Enderby road	1
Esplanade	1	...	...	...	...	...
Ewesley road	1	...	...	1	...	...
Exeter street	1	...	...	1	...	1	1	...	...	...
Exhibition terrace	1	...
Farringdon row	2	...	...	1	1	1	1	...	...	2
Garden place	1
Garnet street	1
General Gerdon terrace...	...	1	...	...	3	1	3	1	...	1	...
General Graham street	1	...	...	1	1	1	...	...	...	...
Gerald street	4	...	...	...	...	...	4	...	...	...	...
Gill Bridge avenue	1	...	...	1	...	...	...	...
Grafton street	1	...	...	...	1	...	...	...	...	...
Granville street	1	...	...	...	...	...	1
Greta terrace	1	...	...	1	...	1	...	...	1	2
Grindon terrace	1	...	...	...	...	...	...
Hanover place	1	...	...	...	...	...	1	...	...	...	...
Harrison street	1	...	...	...	...	...	...	...	...	...
Hawthorn street	1	...	...	...	...	...
Hedley street	2	...	...	...	...	1	...	...	...	...
High Street West	2
Hope street	2
Hopper street	1
Hort street	1	...	...	...	...	...	...
Hume street	1	...	1	...	...	...
Humbledon view	1	...	...	...	...	...	...
Hylton road	2	...	...	...	...	...
Hylton street	1	1	...	...	...	...	2	...	...	...	...
Inflrmay	1	...	...
James street	1	...	...	...	...	...	1	...	...	...	...
John Candlish road	1	...	...	...	...	...	...	...	...	...
Johnson street	2	...	...	...	...	1	...	...	1	4
Kayll road	1	...	...	...	...	...	...
Kimberley street	2	...	...	...	...	1	1	...	...	...
King street	1
Kitchener street	1	...	...	...	...	...	...

TABLE IV.—CONTINUED.

[illegible]

TABLE IV.—Continued.

Street.	CASES NOTIFIED.						Removed to Sanatorium.	Deaths.	DEATHS FROM		
	Smallpox.	Enteric Fever	Typhus Fever.	Continued Fever.	Scarlet Fever.	Diphtheria.			Measles.	Whooping Cough.	Diarrhoea.
St. Luke's road	2	1	...	1	...	...	1
St. Mark's road	1	...	...	1	1	...	..	...	...	..
Stratfield street	1
Tanfield street.....	1	...	...	...	...	...	...
Teb street.....	1
Thornhill gardens	1
Trewhitt's crescent.....	...	1	...	...	...	...	...	1	...	...	...
Trimdon street.....	4	...	...	...	...	...	4	...	...	3	...
Trimdon street West	1	...	1	...	...	...	...
Vicarage terrace.....	2	...	2	1	...	...	...
Victoria buildings	1	...	...
Violet street.....	1	...	..
Walworth street	1
Water street	1
Waterworks road.....	1	1
Well street	1	2
Wellington lane	1	1	1
Western hill.....	1	...	...	...	...	...	...
West street	1	..
Wharncliff street.....	1	...	1	...	...	...	...
Wilfred street	1	...	1	...	...	...	1
Williams street	1	...	1	...	...	2	...	...	...	2
Wilson street	3	...	...	...	1	1
Wood street.....	...	1	...	...	...	...	1	...	..	...	1

TABLE V.

Showing the STATE of VACCINATION in the entire Districts of the Sunderland Union for the Year ending December, 1903, and for the Ten preceding Years.

(AS FURNISHED BY THE VACCINATION OFFICERS.)

Year.	Births Registered.	Total Vaccinated.		Postponed by Medical Authority.	Died previous to Vaccination.	Removal to places unknown or other Unions.	Certificates of (Conscientious Objection) Exemption.
		Succ.	Insus-ceptible				
1893	5910	4602	15	131	715	447	
1894	5927	4453	17	127	722	608	
1895	6091	4523	23	180	762	603	
1896	6015	4307	21	180	699	808	
1897	6202	4606	28	182	689	697	
1898	6352	4355	27	161	974	835	
1899	6501	4706	34	173	924	629	35
1900	6651	4770	18	280	909	625	49
1901	6622	4967	26	208	855	527	39
1902	6700	5008	30	160	747	715	40
Average for } 10 Years, } 1893-02.	6297	4630	24	178	800	649	...
1903	6743	5308	22	102	802	267	42

LOCAL GOVERNMENT BOARD TABLE I.

Showing the Population, Births, and Deaths for the whole of the Borough
for the year 1904 and 10 years preceding.

Year.	Population estimated to Middle of each Year.	Births.		Deaths under 1 year of age		Deaths at all ages. Total.		Deaths in Public Institutions.	Deaths of Non- residents registered in District.	Deaths of Residents registered beyond District.	Deaths at all ages. Nett.	
		Number.	Rate.*	Number.	Rate per 1000 Births registered.	Number.	Rate.*				Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12	13
1894	136200	4760	34.9	804	168	2815	20.7	272	...	...	...	...
1895	137620	4819	35.0	925	191	2990	21.7	356	...	...	...	...
1896	139055	4873	35.4	786	161	2784	19.6	322	...	...	...	...
1897	140505	4905	34.9	822	168	2777	19.7	313	...	...	...	...
1898	141970	5077	35.7	1027	202	3236	22.8	377	...	...	...	...
1899	143450	5184	36.1	913	176	3113	21.7	462	...	...	...	...
1900	144945	5256	36.3	889	167	3147	21.7	405	...	...	...	...
1901	146456	5279	36.0	946	179	3123	21.3	401	...	...	...	...
1902	147983	5391	35.7	825	171	2914	19.3	456	...	...	...	...
1903	149526	5195	34.5	817	157	2970	19.8	481	...	...	...	...
Averages for years 1894-03	142771	5074	35.4	875	174	2987	20.8	384	...	...	...	...
1904	151093	5194	34.4	857	165	2935	19.4	464	...	...	...	...

* Rates calculated per 1,000 of estimated population.

NOTE.—The Deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The Deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of illness, and dying there ; and by the term “Residents” is meant persons who have been taken out of the district on account of illness, and have died elsewhere.

Area of District in acres, 3,396.

Total Population at all ages	146,077	} At Census of 1901.
Number of Inhabited Houses	21,473	
Average Number of Persons per House ...	6.8	

LOCAL GOVERNMENT BOARD TABLE II.

Showing the Population, Births, and Deaths for the Three Districts of the Borough for the year 1904.

Year.	SUNDERLAND EAST.				SUNDERLAND WEST.				SUNDERLAND NORTH.			
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
1894	The Registration Sub-Districts of the Borough were re-arranged in 1902, hence I can only give the figures for 1903 and 1904.	1884	1269	351	61619	2125	1090	280	32488	1186	611	186
1895												
1896												
1897												
1898												
1899												
1900												
1901												
1902												
1903.....												
Averages of Years 1894 to 1903	...	...	...	...	...	...	...	...	...	...	...	...
1904	55884	1960	1185	340	62093	2012	1093	327	33116	1222	657	190

LOCAL GOVERNMENT BOARD TABLE III.
Showing the Cases of Infectious Disease notified during the Year 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.			No. of Cases Removed to Hospital from each Locality.		
	At all Ages.	At Ages—Years.						Sunderland East.	Sunderland West.	Sunderland North.	Sunderland East.	Sunderland West.	Sunderland North.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.						
Small-pox	34	...	1	7	5	21	...	5	17	12	5	17	12
Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	72	...	33	31	5	3	...	13	36	23	...	...	...
Membranous croup	2	...	2	...	...	...	...	...	2	...	...	...	...
Erysipelas	117	2	4	11	15	78	7	40	48	29	...	...	...
Scarlet fever	198	4	69	105	11	9	...	46	91	61	20	47	27
Typhus fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric fever	128	1	9	34	39	45	...	29	40	59	22	23	39
Relapsing fever .....	...	...	...	...	...	...	...	...	...	...	2	...	...
Continued fever	9	...	1	2	3	3	...	...	6	2	...	4	1
Puerperal fever	4	...	...	...	2	2	...	1	3	...	...	...	...
Plague .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	563	7	119	189	80	161	7	135	242	186	49	91	79

LOCAL GOVERNMENT BOARD TABLE IV.

Showing Causes of and Ages at Death during Year 1904.

Causes of Death.	Deaths in whole District at Subjoined Ages.							Deaths in Localities (at all ages).			Deaths in Public Institutions.
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Sunderland East.	Sunderland West.	Sunderland North.	
Smallpox	2					2			2		2
Measles	59	10	43	5	1			27	8	24	2
Scarlet Fever	3		3					1	1	1	2
Whooping Cough.....	64	22	40	2				26	35	3	4
Diphtheria and Membranous Croup	27		18	9				6	15	6	
Croup	1		1						1		
Fever { Typhus											
Enteric	33		2	8	9	14		4	10	19	18
Other continued...											
Epidemic Influenza	10					9	1	4	6		2
Cholera											
Plague											
Diarrhoea	163	123	38	1			1	48	78	37	2
Enteritis	35	25	5			3	2	16	9	10	
Puerperal Fever	2				1	1		1	1		
Erysipelas	5	2				2	1	3	2		
Other Septic Diseases.....	2			1		1		1	1		1
Phthisis	208	3	3	20	55	124	3	82	75	51	54
Other Tubercular Diseases	134	36	45	30	10	13		53	53	28	12
Cancer, Malignant Disease	135		1		1	96	37	49	51	35	46
Bronchitis	310	115	47	2	1	73	72	155	108	47	17
Pneumonia	260	56	70	6	14	82	32	108	91	61	36
Pleurisy	5		1		1	3		1	4		
Other Diseases of Respiratory Organs	15	1	3	1		8	2	4	9	2	
Alcoholism—Cirrhosis of Liver	20					18	2	9	7	4	4
Venereal Diseases	11	8	1			2		6	5		1
Premature Birth.....	109	109						43	49	17	
Diseases and Accidents of Parturition	9				3	6		5	1	3	
Heart Diseases	238		2	9	15	135	77	87	91	60	46
Accidents	94	12	6	11	17	37	11	35	41	18	45
Suicides	8				1	5	2	3	4	1	2
All other causes	973	335	71	25	35	230	277	408	335	230	168
All causes	2935	857	400	130	164	864	520	1185	1093	657	464

SALE OF FOOD AND DRUGS ACT, 1875.

Report of the Public Analyst appointed for the County Borough of Sunderland upon the articles analysed by him under the above Act.

1.—THE QUARTER ENDED 31st MARCH, 1904.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Milk	By an Officer acting under direction of the Town Council.	Genuine	
Do.		Do.	
Do.		13·3 per cent. deficiency of milk fat.	
Do.		Genuine	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		10·3 per cent. deficiency of milk fat.	
Do.		Genuine	
Do.		Do.	
Do.		Genuine, but poor in quality as regards milk fat.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Genuine.	
Do.		Do.	
Do.		Do.	
Butter		Do.	
Do.		Do.	

1.—QUARTER ENDED MARCH 31ST, 1904.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Butter	By an Officer acting under direction of the Town Council.	Genuine.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Lard		Do.	
Do.		Do.	
Do.		Do.	
Coffee		Do.	
Do.		Contains 72 per cent. of chicory.	
Pepper.....		Genuine.	
Do.		Do.	
Do.		Do.	
Cheese.....		Do.	
Do.		Do.	
Do.		Do.	

Genuine Samples	38
Non-Genuine Samples	3
	<hr/> 41 <hr/>

2.—QUARTER ENDED 30TH JUNE, 1904.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Milk	By an Officer acting under direction of the Town Council.	Genuine.	
Do.		Do., but poor in quality.	
Do.		Do. Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do., but poor in quality.	
Do.		Do.	
Do.		Do., but poor in quality.	
Butter		Do.	
Do.		Do.	
Cheese		Do.	
Do.		Do.	
Milk		14·6 per cent. deficient in milk fat.	
Do.		Genuine.	
Do.		23 per cent. deficient in milk fat, and 8·9 deficient in other solids.	
Do.		Genuine.	
Do.		Contains 2·8 grains of boracic acid per pint.	
Do.		Genuine.	
Do.		19·6 per cent. deficient in milk fat, and 6·8 per cent. deficient in other solids.	
Do.		11·0 per cent. deficient in milk fat.	
Do.		21·3 per cent. deficient in Milk fat.	
Do.		Genuine.	

Genuine Samples.....18
Non-genuine Samples..... 6

3.—QUARTER ENDED 30TH SEPTEMBER, 1904.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Butter	By an Officer acting under direction of the Town Council	Genuine.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Lard		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Baking Powder ...		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Pepper		Do.	
Do.		Do.	
Do.		Do.	
Cheese		Do.	
Do.		Do.	
Milk		Do.	
Do.		Do. Poor in quality.	
Do.		Do. Do.	
Do.		Do. Do.	
Do.		Do.	
Do.		18·3 per cent. deficiency of milk fat.	
Do.		13·3 per cent. deficiency of milk fat.	
Do.		25·0 per cent. deficiency of milk fat.	
Do.		Genuine.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do., but poor in quality.	
Do.		Do. Do.	
Do.		Do. Do.	
Do.		Do. Do.	
Do.		Do. Do.	
Do.		Do. Do.	

Genuine Samples..... 34
Non-Genuine Samples 3

4.—QUARTER ENDED 31ST DECEMBER, 1904.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Butter	By an Officer acting under direction of the Town Council.	Genuine.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Lard		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Mustard		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Sago		Not sago, but tapioca.	
Do.		Do. Do.	
Do.		Genuine.	
Cheese.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Coffee		Contains 37·4 per cent. of chicory.	
Do.		Contains 39·0 per cent. of chicory.	
Baking Powder ..		Genuine.	
Do.		Do.	
Do.		Do.	
Cocoa		Contains 22 per cent. of starch and 24 per cent. of sugar.	
Pepper		Genuine.	
Do.		Do.	
Brandy		Of doubtful genuineness.	
Do.		Do.	
Do.		Do.	
Do.		Genuine.	

4.—QUARTER ENDED 31ST DECEMBER, 1904.—Contd.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis : Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
Whisky	By an Officer acting under direction of the Town Council.	Genuine.	
Do.		Do.	
Milk		Do.	
Do.		9 per cent. deficiency of milk fat.	
Do.		Genuine.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		Do.	
Do.		3·3 per cent. deficiency of milk fat.	
Do.		Genuine.	
Do.		Do.	
Do.		Do.	
Do.		Do.	

Genuine Samples	38
Doubtfully genuine samples	3
Non-Genuine Samples	7
	—
	48
	—

SUMMARY FOR THE YEAR.

Genuine Samples examined.....	128
Doubtfully Genuine Samples examined.....	3
Non-Genuine Samples examined	19

JOHN PATTINSON,
Public Analyst.



Annual Report of the Chief Sanitary Inspector.

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HEALTH OFFICE,

TOWN HALL, SUNDERLAND,

MARCH, 1905.

TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.

GENTLEMEN,

I have the honour of submitting to you my Tenth Annual Report, giving details of the work done by the Sanitary Inspectors' Staff during the year ending December 31st, 1904.

During the year regular inspections of the Borough Inspections. have been made to the number of 72,180; these include 2,895 visits to Workshops, 493 visits to Bakehouses, Dairies and Milkshops, 756. Slaughter-houses and Butchers' Shops, 2,532. Dwelling-houses, 18,086. Inspections re Infectious Diseases, 6,092. Tenemented Houses, 16,003. Common Lodging Houses, 1,308. Offensive Trades, 202.

Inspection of Works in progress re abatement of nuisances, 15,549. Consultations and advisory visits with Builders, etc., re work required, 991; and 5,432 visits or calls respecting complaints, or in quest of information, etc.

For details of Inspections see Table I.

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—
Nuisances.

The nuisances discovered during such inspections have been dealt with in accordance with the provisions of the various Health Acts and Bye-Laws in force.

The nuisances discovered were of a varied nature, many were of such a character as to require no structural alterations to procure abatement; or to require the service of a notice; and, in many instances, verbal intimations to the persons responsible was sufficient to bring about the desired effect. (See Table II.)

Complaints.

252 Complaints were received at the Office as to the existence of nuisances. As in past years these are few as compared with the nuisance discovered and dealt with by the Inspectors.

For details see Table III.

Notices.

It was found necessary to issue 9,501 notices under the various Public Health Acts and Bye-Laws and the Factory and Workshops Act for the abatement of nuisances; of this number 6,021 were intimation or preliminary notices, and 3,226 Statutory notices, and 254 were under the Factory and Workshops Act.

It will be observed from Table II. that the principal nuisance arises from privy middens, 1,645 notices being served for this class of nuisance.

The abolition of the insanitary privy middens continues with steady progress, and during the past year 1,193 have been abolished and 1,240 water-closets substituted, and 1,392 ash receptacles provided.

One very pleasing feature in connection with this class of work is the greater willingness of certain owners to carry out work of this description without any notice.

This is very different to what I experienced ten years ago, when the Corporation found it necessary to serve notices for the abolition of privy middens, which could only be cleansed by carrying the contents through the dwelling house, and, in several instances, the occupants had to remain out of bed during the night to allow the scavengers to do their work.

The benefit to the community by the abolition of privy middens is shown in the reduced cases of filth-borne infectious disease during the past year, as compared with that of previous years. The general public are beginning to appreciate this fact. It is rare, indeed, to hear the remark: "The tenant does not want a water-closet." I know that in many instances tenants object to take a house unless it is provided with a water-closet.

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For details see Table IV.

Amongst other work done in the abatement of nuisances were 333 dwelling houses, which underwent general repair, and 37 were provided with new spouts, and 674 were cleansed and lime-washed.

Structural
work done.

The sanitary conveniences to dwelling houses, and fittings connected therewith, which have been re-constructed or repaired, number 577, which include 152 new dustbins, whilst 1,578 house drains have been re-constructed, and 195 repaired.

The yard pavements repaired were 85, whilst 215 yard surfaces were covered with cement concrete. (See Table V.)

There were 78 cases of overcrowding dealt with, and in each instance the nuisance was abated on the service of notice conjointly upon the occupier and owner.

Over-
crowding.

For details see Tables IV. and V.

The clerical work during the past year has been extra heavy, as, in addition to reports, notices and ordinary routine Office Work, the following Correspondence, Circulars, &c., have been sent out:—

Correspon-
dence.

50 Special Reports were made on result of drain testing, &c.

919 Letters were written and 639 Circulars were sent out respecting Notices which had not been complied with.

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Lists notifying outbreak of Infectious Diseases in dwelling houses were sent out as follows :—

To the Infirmary, 101.

„ Laundries, 1,040.

„ Public Libraries, 364.

98 Circulars were sent to the Day Schools, and 51 Circulars to the Sunday Schools, requesting that the children be kept from School who were residing in houses where cases of Infectious Disease existed.

55 Books belonging to the Public and Circulating Libraries, which had been exposed in houses where cases of Infectious Disease existed, were taken possession of by the Inspectors and thoroughly disinfected before being passed on to the Libraries.

In cases of Smallpox the Books are destroyed.

Drain Testing

There has been the usual amount of drain testing during the year, and as a result a very considerable number of drains have been re-constructed and repaired. All such being laid in accordance with the Bye-Laws, 13,141 feet of 4-inch, 352 feet of 6-inch, and 32 feet of 9-inch drains being so laid and tested by the Inspectors.

Applications were made by 48 occupiers and owners to have the drains and sanitary fittings examined and tested. In 21 cases defects were found of a more or less serious nature; 115 tests were applied to drains and sanitary fittings on premises where Infectious Disease, viz., Enteric Fever or Diphtheria had been notified, and 23 were found to be defective. (See Table VI.)

Housing of
the Working
Classes.

There have not been many properties dealt with under this Act during the past year, Notices for two houses only being served, both these houses were closed without Magistrates' Orders.

There were 41 properties being dealt with at the end of 1903. These have been repaired and rendered fit for human habitation, with one exception, and this one has been closed.

There has not been during the year so many cases of Infectious Diseases, consequently there were less inspections of houses; 884 houses being visited, as against 2,313 last year.

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—
Infectious
Diseases and
Contacts.

There has been stringent and systematic visiting during the quarantine period of Smallpox, of which it is a very pleasing feature to say that we have had so few cases, when we remember that all around us, particularly on the Tyne, there has been a mild epidemic of this loathesome disease, nevertheless, the inmates of 393 dwelling houses were visited and examined, and questioned as to cases of sickness in their homes, owing to cases of Smallpox having been notified from the adjoining neighbourhood or at the works; 3,820 visits were made to contacts during the period of three weeks after the discovery of each case of Smallpox.

The work done by the Disinfector is as follows:—

Disinfection.

4,129 articles of wearing apparel and 816 dwelling rooms were disinfected.

58 beds and mattresses were destroyed.

In addition to which 217 patients were removed to the Borough Sanatorium, and 271 Smallpox Contacts were removed for purposes of disinfection.

For details of disinfecting work see Table VII.

The work of measuring Houses Let in Lodgings (or Tenemented Houses) has been continued, and there was on the 31st December last 653 houses on the register, comprising 3,926 rooms, as against 209 houses in December, 1903.

Tenemented
Houses.

These are being regularly inspected, 11,200 visits being made.

Tenemented property requires an enormous amount of attention, which must be regular, as it is a very difficult matter to instil into the mind of the dweller in this class

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of property the lessons of cleanliness, and particularly so where you have a number of tenants using one common staircase, yard, and convenience. It is particularly in these cases where it is found necessary to use stringent measures to procure anything like cleanly conditions.

It was found necessary to issue 58 Summonses for the fouling of sanitary conveniences, and in all cases fines were inflicted, viz., 53 fines of 2s. 6d. each, 2 fine of 3s. 6d. each, and 3 fines of 7s. 6d. each.

72 Notices had to be served for dirty rooms, &c., and 265 Limewash Notices. 52 Notices for overcrowding, and 36 for choked drains.

For details see Tables I. and IV.

Dairies and
Cowsheds.

There are at present on the register 41 Cow Byres, with accommodation for 240 Cows, being 2 Byres less than last year.

There have been 144 Dairies and Milkshops registered, and 34 withdrawn, leaving 503 on the register on 31st December last.

These have been regularly inspected, 697 visits being made; and they were all found to be in a satisfactory condition.

In cases where an Infectious Disease had been notified, the sale of milk at these premises was immediately discontinued, and the patient removed, and the premises thoroughly disinfected.

Common
Lodging
Houses.

The Common Lodging Houses have been regularly inspected, and found to be in a satisfactory condition, so far as cleanliness and management were concerned.

Two cases of overcrowding (during a midnight inspection) were discovered. One Keeper was written and cautioned, and in the other case a Summons was taken out. This case was dismissed on the defendant putting 2s. 6d. into the Poor Box.

There are 26 houses on the register, with lodging accommodation for 901 lodgers, as against 24 houses accommodating 908 lodgers last year. (See Table VIII.)

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There were 10 applications to be registered as Keepers of Common Lodging Houses, 4 of these being for transfers, i.e., of houses which had previously been registered, 3 were granted and 1 refused.

In 4 cases applications for new licenses were granted, and 2 refused.

For details see Table VIII.

There are a number of dwelling vans of showmen and hawkers who visit the Borough at holiday times. These have during their sojourn in the town been inspected daily, in order to ascertain their sanitary condition, and also for the purpose of detecting any infectious disease which might exist amongst the inmates. The condition of the vans was quite satisfactory, and no infectious disease was found to exist amongst any of the occupiers.

Vans used as
Dwellings.

Frequent and regular inspections have been made of the Slaughter Houses; these were found to be in a satisfactory condition so far as their general cleanliness was concerned. The removal of the garbage and manure has, however, at times caused trouble, owing to the fact that many of the Butchers have to depend on some one (Farmers generally) calling for it, and when they neglect to do so, a serious nuisance is caused.

Slaughter
Houses.

It would be a great advantage to all, and certainly beneficial from a health point of view, if some arrangement could be come to between the Corporation and the Butchers, whereby the garbage and manure could be removed at regular intervals, a nominal charge being made. If this could be done the system should embrace such trades as Fishmongers and Fruiterers, for, undoubtedly, the refuse from these trades is as dangerous to health as that of Butchers' refuse.

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That something of this nature will in the near future be necessary, there is little doubt; from the fact that refuse from these particular trades is now deposited on land either in the Borough or close to the Borough, and cause frequent complaints of nuisances.

Another matter of which frequent complaints are heard is the removal of manure and dung through the streets during all hours of the day. This should be prevented by a Bye-Law, regulating its removal during certain hours, say between 11 p.m. and 6 a.m.

Offensive
Trades.

There are 30 of these places in the Borough, all of which have been visited regularly during the year. These establishments are generally conducted satisfactorily, and few complaints are received about them. The Legislature provides for the registration of offensive trades, and model Bye-Laws have been prepared, but neither the registration nor the Bye-Laws have yet been put in force in Sunderland. (See Table IX.)

Unsound
Food.

The seizure of Unsound Food did not necessitate any Police Court Proceedings. The Butchers, generally, give us every assistance with regard to the examination of meat, and, on the slightest suspicion of the meat being unfit for food, they seek our advice, and in every case where the carcase was, in our opinion, unsafe for food, it was surrendered; the owner of the same consenting to its destruction without any formal application being made to a Magistrate.

The seizures include the whole carcase and all internal organs of 18 animals which were found to be effected with Tuberculosis, and the offal of 12 animals was also condemned for the same reason. (See Table X.)

Factories and
Workshops.

There are 175 Factories and 666 Workshops, the latter employing 1,411 males and 1,134 females. (See Tables XI. and XII.)

The Inspector appointed under the above Act has made 9,433 Inspections, and 254 Notices have been served. (See Tables XIII. and XIV.)

It will be observed that 35 Notices, representing 34 Nuisances, were served to provide New Sanitary Conveniences for Workshops.

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During the year 49 water-closets and 8 trough-closets have been provided for Workshops and Factories; one urinal was also erected for the use of the employees of a Factory.

Ten water-closets and two trough-closets have also been provided for Workshop or Factory without the service of a Notice being necessary.

Frequent visits of inspection and enquiry are made, in order to enforce the requirements of this Act.

Shop Hours
Act.

In compliance with Section 107 of Factory and Workshop Act, 1901, which is as follows:—

Outworkers.

“The occupier of every Factory and Workshop and every Contractor employed by any such occupier in the business of the Factory or Workshop shall:—

“(A.) Keep in the prescribed form and manner, and with the prescribed particulars, lists showing the names and addresses of all persons directly employed by him, either as workman or as Contractor, in the business of the Factory or Workshop, outside the Factory or Workshop and the places where they are employed; and

“(B.) Send to an Inspector such copies of or extracts from those lists as the Inspector may from time to time require; and

“(C.) Send on or before the first day of February and the first day of August in each year copies of those lists to the District Council of the district in which the Factory or Workshop is situate.”

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REPORT,
1904.

87 employers have forwarded to the Health Office lists bearing the names and addresses of 247 male and female outworkers.

The majority of these outworkers are engaged in the tailoring trade, the work being done at their own homes.

An inspection of these premises shows that the conditions under which they work, with regard to light, ventilation, and cleanliness, are fairly satisfactory.

8 Factories or Workshops did not display an Abstract of the Factory and Workshop Act, 1901, as required by Section 128. These cases were reported to H.M. Inspector of Factories.

Bakehouses. There are 148 Bakers and Confectioners on the register. Four of these are large Bakehouses, the majority of the remainder are, however, on a small scale.

490 Inspections have been made of these Bakehouses, and a system of cleanliness is rigidly enforced.

There are only eight "Underground Bakehouses" in the Borough. Several of the occupiers have made a verbal application for the Certificate, which may be granted by the District Council, in accordance with Section 101 of the Factory and Workshop Act. No Certificates have yet been granted.

Smoke
Nuisances.

During the past year several complaints were received at the Health Office (and verbally by the Inspectors) of nuisances caused by the emission of black smoke from chimneys of certain Factories or Works in the Borough, and in consequence of which I had observations taken of these chimneys.

The observations were taken at varying intervals and at varying periods during the day, so as to obtain a fair average of the emission of black smoke. It was found from these observations that some Works were all but constantly causing dense smoke to be emitted from their chimneys, as the following Table shows :—

SUMMARY OF SMOKE OBSERVATIONS.

Emissions of Black Smoke stated in Minutes per Hour.

Date.	26th July.		27th July.		28th July.		3rd August.		4th August.		5th August.	
Time.	10.0 to 11.0 a.m.	3.8 to 4.8 p.m.	9.38 to 10.38 a.m.	4.0 to 5.0 p.m.	9.15 to 10.15 a.m.	2.20 to 3.20 p.m.	10.0 to 11.0 a.m.	3.30 to 4.30 p.m.	9.30 to 10.30 a.m.	3.0 to 4.0 p.m.	7.10 to 8.10 a.m.	2.7 to 3.7 p.m.
A	20	13½	19	14½	21½	14½	—	—	—	—	—	—
B	27½	9	14	10	20	15	—	—	—	—	—	—
C	23½	8	18	12	26	17	—	—	—	—	—	—
D	—	—	14½	15	21	18½	—	—	—	—	—	—
E	30½	16	21½	—	15½	7	—	—	—	—	—	—
F	9	7½	4½	7½	4½	9	—	—	—	—	—	—
G	Practically constant. Very excessive.						60	20½	57	37	45	39½
H	—	—	—	—	—	—	11½	—	28	—	—	—
I	—	—	—	—	—	—	4½	9	3	9	4	5
J	—	—	—	—	—	—	18	38	24½	20	29	26
K	—	—	—	—	—	—	23½	24	23	27½	28½	34

The owners of the respective chimneys were written to, enclosing a copy of the results of these observations, and drawing their attention to the fact that Section 91 of the Public Health Act, 1875 (Sub-Section 7), states that “ Any chimney (not being the chimney of a private dwelling house) sending forth black smoke in such quantity as to be a nuisance, shall be deemed to be a nuisance.”

In many towns this matter has received very careful consideration, and very stringent regulations are in force limiting the amount of black smoke to be allowed per hour, beyond which it is considered to be a nuisance, and, after due warning, Magisterial Proceedings are taken.

This time limit varies from 3 minutes per hour at Nottingham, to 10 minutes per hour at Huddersfield.

There is no doubt that the emission of black smoke is detrimental to health, cleanliness and general comfort of the public, and it has been very clearly proved that it is due to one of the following three causes, viz., over-working of boilers, carelessness on the part of firemen in stoking, or the use of inferior fuel.

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This question is one which will, no doubt, receive the serious attention of the Committee in the near future, and certain of the Works in our midst might with advantage to themselves and the public, reduce in a very large measure the quantity of black smoke now being emitted from their chimneys.

**Food and
Drugs.**

Under the Sale of Food and Drugs Act 150 Samples were submitted to the Public Analyst. 128 of these were certified to be genuine, 19 to be adulterated, and 3 doubtful. (See Table XV.)

Four samples of Coffee were not submitted, as when purchased the articles supplied were in a printed wrapper stating that they were sold as a mixture, as required by Section 12 of the Sale of Food and Drugs Act.

Under the Sale of Food and Drugs Act, 10 Summonses were issued, and fines were inflicted in 5 cases and 5 were dismissed.

In each case where the Magistrates dismissed the case they expressed the opinion that they considered the Corporation were quite justified in taking the cases into Court, but on the evidence produced by the defendants they were satisfied that the samples of milk in question had not been adulterated.

For details see Table XV.

**Magisterial
Proceedings.**

It was found necessary to report to the Health Committee that 263 persons had failed to comply with the Notices served upon them requiring the abatement of nuisances, and the Committee gave instructions for summonses to be issued. After communicating this fact to the persons responsible, 224 were complied with, without further action, but in the remaining 39 cases, summonses were issued.

For details see Table XVI.

Notices were sent to the Police, from time to time, of nuisances arising from offensive liquids leaking from ashpits on to the streets, and from filth being thrown on

the street pavements and catchpits. Summonses were taken out, and the following cases were dealt with :—

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For allowing offensive matter to flow from ashpits, 1 fined 2s. 6d. and costs, and 4 fined 2s. 6d. each.

For throwing filth on to street pavements and street catchpits, 2 fined 2s. 6d. each.

It was found necessary to issue 118 Summonses for various offences under the Public Health Act.

In 4 cases Orders were made to abate nuisances in the terms of the Notices served.

In 17 cases the Summonses were withdrawn on the nuisance being abated and on payment of costs.

Summonses were taken out against 60 occupiers, 58 of whom were convicted, with fines ranging from 7s. 6d. to 2s. 6d. each, and 2 were dismissed.

TABLE I.
Showing Visits made by each Inspector.

INSPECTIONS.	No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	No. 5 District.	No. 6 District.	Workshops Inspector.	Tenementd. House Inspector.	Totals.
INSPECTIONS OF WORKSHOPS, &c. :—									
Factories and Workshops	6	...	1	...	6	...	2882	...	2895
Shop Hours Act : "Inquiries"...	...	...	...	...	...	...	96	...	96
Domestic Workshops and Out- Workers .....	...	...	...	...	...	...	330	...	330
Bake Houses.....	...	...	...	...	...	3	490	...	493
Cowsheds .....	...	67	...	...	4	3	...	...	74
Dairies and Milk Shops	33	...	25	...	...	1	697	...	756
Slaughter Houses and Butchers' Shops	1	2527	2	...	...	2	...	..	2532
Fish and Fruit Shops	2	418	4	20	...	11	...	...	455
Appointments and Advisory Visits..	183	230	59	208	221	81	...	9	991
VISITS TO DWELLING HOUSES :—									
Dwelling Houses	1713	3808	1710	2736	5254	2703	...	162	18086
Dwelling Houses, <i>re</i> Infectious Diseases.....	145	...	33	134	290	141	...	141	884
Dwelling Houses, <i>re</i> Smallpox Contacts	59	97	29	291	390	125	4213	4	5208
Tenemented Houses	413	1057	10	1191	876	1256	...	11200	16003
Common Lodging Houses	445	802	33	...	24	...	...	4	1308
Inspections of Works in Progress, Drains, W.C.'s, &c.	3650	1237	2128	2317	2206	3529	...	482	15549
Calls made, &c.....	1820	644	674	...	1050	1087	...	157	5432
Sale of Food and Drugs Acts.....	32	...	29	6	21	40	...	12	140
INSPECTIONS OF OFFENSIVE TRADES, &c. :—									
Tripe and Skin Preparers, &c. ...	1	104	...	...	...	1	...	...	106
Fried Fish Shops.....	...	...	...	...	...	9	...	...	9
Marine Stores ..	2	20	...	...	...	...	...	47	69
Hide, Skin, and Tallow Dealers...	4	...	...	...	...	...	...	...	4
Stables, Mews, &c. ....	...	...	...	...	6	8	...	...	14
Other Visits	2	...	1	9	9	...	725	...	746
Total Inspections.....	8511	11011	4738	6912	10357	9000	9433	12218	72180

TABLE II.
SUMMARY OF NOTICES for the Abatement of Nuisances
served during 1904.

Nature of Notice.	Preliminary.		Statutory.		Work-shops Inspector	Totals
	Owner.	Occupier	Owner.	Occupier		
To Cleanse Premises	1	133	...	26	...	160
„ „ after Infectious Disease .....	...	231	7	199	...	437
To Abate Nuisances arising from						
„ Drains	312	19	125	...	6	462
„ Water-Closets	381	70	116	...	10	577
„ Privies and Ash-Pits	913	...	732	...	...	1645
„ Yard Pavements ..	235	17	176	...	1	429
„ Dilapidated Houses	267	..	145	...	...	412
„ Defective Spouts, &c.....	286	...	93	..	6	385
„ Animals and Fowls	3	40	...	6	...	49
„ Overcrowding.....	40	45	34	33	...	152
„ Manure and Refuse	13	13	3	3	..	32
„ Other Nuisances	124	...	23	...	1	148
To Limewash Dwelling Houses.....	1332	1546	...	1505	...	4383
„ Factories and Workshops .....	...	...	...	...	29	29
To Provide Additional Light and Ventilation to Workshops..	...	...	...	...	4	4
„ List of Outworkers.....	...	...	...	...	89	89
„ Conveniences to Factories and Workshops.....	...	...	...	...	35	35
To Display Shop Hours Act.....	...	...	...	...	5	5
Reported to H.M. Inspector of Factories .....	...	...	...	...	8	8
Failure to Display Abstract .....	...	...	...	...	1	1
Other Reports to H.M. Inspector of Factories.....	...	...	...	...	34	34
Reports to Borough Surveyor .....	...	...	...	...	25	25
Other Reports..	...	...	...	...
Totals.....	3907	2114	1454	1772	254	9501

TABLE III.
COMPLAINTS RECEIVED AT THE HEALTH OFFICE,
and attended to during the year 1904.

NATURE OF COMPLAINTS.	Totals.
Smoke Nuisance	2
Overcrowding	15
Damp and Dilapidated Houses.....	1
Defective Roofs and Spouts	27
Dirty Yards, Rooms, &c.	4
Defective Yards	7
Foul and Defective Water Closets.....	33
Defective Privy Middens	19
* Defective Drains	89
Animals kept in such a state as to be a nuisance ...	5
Insufficient and Unsuitable Water Closet Accomo- dation for Factories and Workshops.....	1
Accumulation of Offensive Refuse.....	11
Houses without a proper supply of Water	2
Other Nuisances	36
Total	252

* 23 of these were requests to test drains, not actual complaints.

TABLE IV.

Showing Notices served in each District.

	No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	No. 5 District.	No. 6 District.	Tenemented House Insp'ctor.	Workshops' Inspector.	TOTALS.
To Cleanse Premises	9	32	...	15	22	10	72	...	160
To Cleanse Premises after Infectious Disease	63	37	42	82	81	128	4	...	437
To abate Nuisance arising from :—									
Drains	86	92	21	63	80	78	36	6	462
Water-Closets	117	102	18	69	69	89	103	10	577
Privies and Ashpits	379	148	155	359	248	347	9	..	1645
Yard Pavements	123	52	17	42	70	90	34	1	429
Dilapidated Houses	95	60	6	48	77	20	106	..	412
Defective Spouts, &c.	58	65	18	87	58	77	16	6	385
Animals and Fowls	3	26	...	3	15	2	...	...	49
Overcrowding.....	48	20	...	6	14	12	52	...	152
Manure and Refuse	14	...	...	4	5	9	...	...	32
Other Nuisances	19	32	3	3	43	32	15	1	148
To Lime-Wash Dwelling Houses	916	1067	...	578	968	589	265	...	4383
" Factories and Workshops...	...	...	...	..	...	...	...	29	29
To provide additional Light and Ventila- tion to Workshop ... ..	...	...	...	...	...	...	..	4	4
To provide List of Outworkers .....	...	...	...	...	..	...	...	89	89
To provide Conveniences to Factories and Workshops.....	...	...	...	...	...	...	...	35	35
To display Shop Honrs Act .....	...	...	...	...	...	...	...	5	5
Reported to H.M. Inspector of Factories } Failure to display Abstract.....	...	...	...	...	...	...	...	8	8
Other Reports to H.M. Inspector of Fac- tories .....	...	...	...	...	...	...	...	1	1
Reports to Borough Surveyor .....	...	...	..	..	...	...	...	34	34
Other Reports .....	...	...	...	...	...	...	...	25	25
TOTALS	1930	1733	280	1359	1750	1483	712	254	9501

TABLE V.

STRUCTURAL WORK DONE.

Drains :—		Dwelling Houses :—	
Repaired	195	Generally repaired ...	333
Reconstructed	1578	New Spouts or repaired	37
Privies and Ashpits :—		Cleansed or lime washed	674
Repaired	465	Overcrowding abated..	78
Abolished	1193	Baths, Sinks, etc.....	47
W.C. and Bin provided	1240	Houses unfit for Human	
W.C.'s and Urinals :—		Habitation :—	
New ones provided ...	58	Repaired	50
Repaired or recon-		Closets	1
structed	305	Demolished	1
Lighted or ventilated	11	Unsound Food :—	
Ashpits (Dust Bins :—		Meat.....	11298 lbs.
Repaired	4	Fish	756 lbs.
New Bins provided ...	152	Fruit.....	90 lbs.
Yard Pavements :—		Food and Drugs Act :—	
Repaired	85	Samples purchased for	
Reconstructed	215	analysis	128

TABLE VI.
DRAIN TESTING.

	Nature of Test.			Total.	Defective.
	Water.	Chemical.	Smoke.		
Drains Tested on Complaint.....	7	7	34	48	21
„ on Suspicion of Nuisance...	9	53	27	89	33
„ after Infectious Disease ...	2	107	6	115	23
Totals	18	167	67	252	77
The following is a Table of Drains Tested after Alterations or Repairs :—					
Drains Tested to ascertain if work in progress was satisfactory	2352	89	61	2502	132
Drains Retested	392	11	9	412	38
Totals	2744	100	70	2914	170

TABLE VII.
DISINFECTING.

Articles.	Disinfected.	Burned.	Rooms.	No.
Beds.....	381	2		
Mattresses	339	27		
Blankets..	546	...		
Pillows	761	...		
Quilts	620	...		
Bolsters	259	...		
Sheets.....	531	29		
Carpets.....	36	...		
Shawls.....	46	...		
Sundries.....	610	...		
Totals	4129	58	Total	816

REGISTERED COMMON LODGING HOUSES.

TABLE VIII.

LOCALITY OF HOUSE.	No. of Rooms.	No. of Lodgers.	No. of Single Beds.	No. of Double Beds.	No. of Beds under the Registered Accommodation.
5, Cumberland Street.....	12	43	43	—	—
4 and 5, Bedford Street.....	12	78	67	4	3
3 and 4, Charles Street	12	37	37	—	—
33, Number's Garth	5	14	5	4	1
42, Covent Garden Street	7	15	5	5	—
3, George Street East	5	18	18	—	—
44, Spring Garden Lane	7	12	6	3	—
41, 42, and 43, Spring Garden Lane	12	41	19	10	2
38, Spring Garden Lane	8	21	3	9	—
6, Maud's Lane	8	38	10	12	4
1, Horn's Lane	8	36	36	—	—
10, Church Street East	7	29	29	—	—
35, Lombard Street	8	18	10	4	—
2, Queen Street East	7	47	21	13	—
2, Arras Lane.....	8	64	40	12	—
3, Mill Street	8	22	2	10	—
39, Outram Street	5	12	1	5	1
13, Havelock Street	8	20	6	7	—
3 and 4, Queen Street East	6	46	46	—	—
14 and 15, George Street East	18	53	53	—	—
11, Grey Street }	14	83	83	—	—
29, High Street East }					
5 and 6, High Street East	8	112	112	—	—
170, High Street East	2	5	3	2	—
29, Warren Street	2	9	—	3	3
10, Old Grey Street	5	13	4	3	3
195½, High Street East.....	2	15	13	1	—
Totals	104	901	672	107	17

APPLICATIONS FOR NEW LICENSES :—

195½, High Street East	Granted.
186, do.	Refused.
170, do.	Granted.
106, do.	Refused.
29, Warren Street	Granted.
10, Old Grey Street.....	Granted.

APPLICATIONS FOR TRANSFER OF LICENSES :—

11, Numbers Garth	Refused.
10, Church Street East	Granted.
44, Spring Garden Lane	Granted.
3, George Street	Granted.

TABLE IX.
OFFENSIVE TRADES.

The Offensive Trades carried on in the Town are as follows:—

Gut Scraping Houses	2
Tallow Melting Works	1
Marine Store Dealers	10
Fish Curing Houses	3
Chemical Works	2
Tripe Preparers	8
Skin Warehouses	1
Oil and Grease Works	1
Paint Works	2
Total.....	30

TABLE X.
TABLE OF FOOD CONDEMNED AND DESTROYED.

NATURE OF FOOD SEIZED.	Quantity.
MEAT.	
Beef	11,088 lbs.
Pork	210 lbs.
Lungs	21 sets.
Organs of Animals	14 sets.
Rabbits (frozen)	$\frac{1}{2}$ doz.
FISH.	
Dried Fish	756 lbs.
FRUIT.	
Cherries	90 lbs.

TABLE XI.

Showing the Number of Registered Factories in the Borough.

Factories	No. of Factories.	Factories.	No. of Factories.
Ale Bottlers	3	Ironfounders.....	12
Bakers	4	Joiners	21
Bicycle Makers	2	Millers	3
Bookbinders	3	Mineral Water Manufacturers	6
Boot and Shoe Makers	2	Model Maker	1
Bottle Maker	1	Moulding Mills	1
Box Maker	1	Organ Builder	1
Brass Founders	5	Paint Manufacturers	2
Blacksmith	1	Paper Bag Maker	1
Boat Builder.....	1	Potter	1
Brewers.....	6	Plumber	1
Brick Makers	3	Preserve Makers	2
Brush Maker	1	Printers.....	22
Cabinet Makers	9	Pipe Makers.....	2
Candle Maker	1	Sail and Flag Maker	1
Carriage Builders	3	Sculptor.....	1
Cattle Spice Maker .	1	Shipbuilders and Repairers.....	6
Compass Makers	3	Ships' Lamp Makers	2
Dyer	1	Steering Wheel Maker	1
Engineers	16	Stocking Knitter.....	1
File Maker	1	Stone Dressers.....	3
Finings Manufacturer	1	Timber Sawyers	4
Galvanizer.....	1	Tobacco Manufacturer	1
Gas Manufacturer	1	Whiting Manufacturer	1
Glass Manufacturers	2	Window Blind Maker.....	1
Gun Maker	1	Wood Turners	2
Ice Cream Maker	1		
	<hr/> 75		<hr/> 100

TABLE XII.

Showing the Number of Registered Workshops, Nature of Trades,
and Number of Employees.

TRADES.	Number of each.	Em- ploying		TRADES.	Number of each.	Em- ploying.	
		Males.	Females.			Males.	Females.
Ale Bottlers	3	6	3	Mattress Makers	5	15	...
Artificial Stone Maker ...	1	8	..	Milliners and Dressmakers	100	...	740
Bakers and Confectioners..	144	94	170	Model Makers	3	7	...
Bicycle Makers.....	9	20	...	Paper Bag Maker	1	...	4
Blacksmiths	23	94	...	Pattern Maker.....	1	4	...
Block and Mast Makers...	2	4	...	Photographers	3	3	6
Boat Builders	4	22	..	Picture Frame Makers ...	9	16	...
Botanical Brewer.....	1	2	1	Pipe Makers.....	2	6	3
Boot and Shoe Makers ...	63	112	...	Plumbers	24	130	...
Brush Makers	3	6	14	Salt Packers.....	2	2	6
Cabinet Makers	26	104	...	Sculptors	5	22	...
Cartwrights	8	29	...	Sign Writer	1	3	...
Carvers and Gilders.....	3	8	...	Slipper Maker	1	1	...
Clogger	1	1	...	Stocking Knitters	5	...	10
Coachbuilder.....	1	12	...	Sugar Boilers.....	2	2	4
Compass Maker	1	3	...	Tailors	85	278	135
Coopers	5	14	...	Tent Maker	1	12	2
Coppersmith	1	2	...	Tinsmiths	9	16	...
Disinfectant Maker	1	3	...	Toy Maker	1	1	...
Drysalter	1	3	...	Tripe Preparers	8	8	8
Electrical Engineer	1	3	...	Umbrella Maker	1	2	...
Engravers	2	4	...	Upholsterers	4	60	16
Fish Curers	3	5	12	Watchmakers	8	12	...
Grease and Varnish Maker	1	4	...	Weighing Machine Maker	1	4	...
Gut Scrapers.....	2	4	...	Whitesmith	1	1	...
Harness Makers	5	16	...	Window Blind Maker ...	1	1	...
Joiners	60	220	...	Wire Worker	1	1	...
Leather Cutter	1	1	...				
	381	804	200		285	607	934

TABLE XIII.

FACTORIES AND WORKSHOPS.

The following work has been performed by the Inspector
appointed for this purpose.

VISITS OF INSPECTION.	
Factories	460
Workshops.....	2358
Workplaces	64
Outworkers	330
Shop Hours Act—Enquiries	96
Restaurants, Kitchens.....	56
Other Visits	669
Totals	4033

TABLE XIV.

NOTICES (WORKSHOPS).

To Cleanse or Limewash	29
„ Workshop Roof Defective	2
„ Provide Conveniences.....	35
„ Limewash Conveniences.....	2
„ Repair Conveniences	8
„ Repair Defective Drains	4
„ Repair Ceilings	3
„ Repair Defective Spouts	1
„ Provide Additional Light and Ventilation to Workshop	4
„ Abate Nuisance arising from Gas Stove.....	1
Yard Pavement Defective	1
Scullery Waste Untrapped.....	2
To Provide List of Outworkers	89
„ Display Shop Hours Act	5
Failure to Display Abstract—Reported to H.M. Inspector of Factories	8
Other Reports to H.M. Inspector of Factories..	1
Reports to Borough Surveyor.. ..	34
Other Reports	25
Totals	254

TABLE XV.
ANALYSIS OF FOOD AND DRUGS.

Articles Analysed.	No. Analysed.	Result of Analysis.			Extent of Adulteration.	Result of Proceed- ings.
		Genu- ine.	Adult- erated.	Doubt- ful.		
Milk	74	61	13		13·3 per cent. deficient in fat... 10·3 per cent. do. 2·8 grains Boracic Acid per Pt. 11·0 per cent. deficient in fat... 21·3 per cent. do. 14·6 per cent. do. 8·9 per cent. do. 6·8 per cent. do. ·9 per cent. do. 18·3 per cent. do. 13·3 per cent. do. 3·3 per cent. do. 25 per cent. do.	Dismissed Dismissed Fined 5s. Fined 20s. Fined 2/6. Fined 2/6 and Costs. Dismissed Dismissed Dismissed Fined 10s. and Costs.
Butter	20	20				
Lard	12	12				
Coffee	4	1	3		72 per cent. Chicory 39 per cent. do. 37·4 per cent. do.	Cautioned
Pepper	8	8				
Cheese	12	12				
Baking Powder	6	6				
Mustard	4	4				
Sago	3	1	2		2 Tapioca	
Cocoa	1		1		{ 54 per cent. Cocoa 22 per cent. Starch 24 per cent. Sugar.....	
Brandy	4	1		3		
Whisky.....	2	2				
Totals	150	128	19	3		

TABLE XVI.
MAGISTERIAL PROCEEDINGS.

Particulars of Complaints.	No.	How disposed of.	Penalties Imposed.
Houses in a dilapidated state ...	1	Withdrawn £	0 4 0
House roof and spouts defective	5	4 withdrawn, 1 abatement order	1 5 0
Yard and washhouse pavements out of repair	3	3 withdrawn	0 12 0
Ceiling out of repair	1	Withdrawn	0 4 0
Drains out of repair	4	4 withdrawn	0 16 0
Interior dilapidations.....	1	Withdrawn	0 4 0
Adulterated Milk	10	5 dismissed ; 1 fined £1 ; 2 fined 2s. 6d. ; 1 5s. ; 1 10s. and costs	2 4 0
Refusing to pay for work done by Corporation	4	4 orders made for recovery of expenses.....	1 16 0
Accumulation of refuse in yard...	1	Abatement order	0 9 0
Tripe Boiling without permission	1	Fined 5s. and costs.....	0 9 0
Watercloset defective.....	3	3 withdrawn	0 12 0
Foul and defective water-closets	60	53 fined 2s. 6d. ; 2 fined 3s. 6d. ; 3 fined 7s. 6d. ; 2 dismissed.	8 2 0
Infringement of Bye-laws.....	3	3 dismissed	
Premises dirty.....	1	1 dismissed	
Overcrowding in Common Lodging House.....	1	Put 2s. 6d. into Poor Box.....	0 2 6
Privies and ashpits out of repair	19	17 dismissed ; 2 abatement orders	0 18 0
Total.....	118	£	17 17 6

I am, Gentlemen,

Your obedient Servant,

JOHN PENNOCK,

Inspector of Nuisances.

Health Office,
April, 1905.

PLAN OF THE BOROUGH OF SUNDERLAND

The dotted lines show the divisions of the Borough into Registration Sub-Districts, whose names are indicated as follows:—

S.E.—Sunderland East; **S.W.**—Sunderland West; and **S.N.**—Sunderland North.

Showing the Deaths from Diarrhoea and Consumption, and the cases of Enteric and Continued Fevers notified during the year 1904.

	ESTIMATED POPULATION.
Sunderland East Sub-District	55,884
Sunderland West Sub-District	62,093
Sunderland North Sub-District	33,116
Whole Borough	151,093

Cases of Enteric and Continued Fevers in BLACK.
Deaths from Diarrhoea in GREEN.
Deaths from Consumption in RED.

REFERENCE.

The back ground colours show the sub-soil in the different portions of the town.
BLUE indicates districts where the Magnesian Limestone comes to the surface or near to the surface.

THE UNCOLOURED PORTION indicates areas where the surface is covered by Boulder Clay. In many places the Boulder Clay contains packets of sand and admixtures of sand. Where this has been found to be the case, the uncoloured portion is marked with Brown S's.

BROWN indicates areas where deposits of sand and gravel on the Boulder Clay have occurred naturally.

YELLOW indicates areas where ships' ballast has been tipped on top of the clay.

GREEN indicates made ground. These areas are valleys, low lying ground, quarries, and clay-pits filled up with various kinds of tipped stuff.



COUNTY BOROUGH OF SUNDERLAND.
METEOROLOGICAL AND DISEASE CHART FOR 1904.

